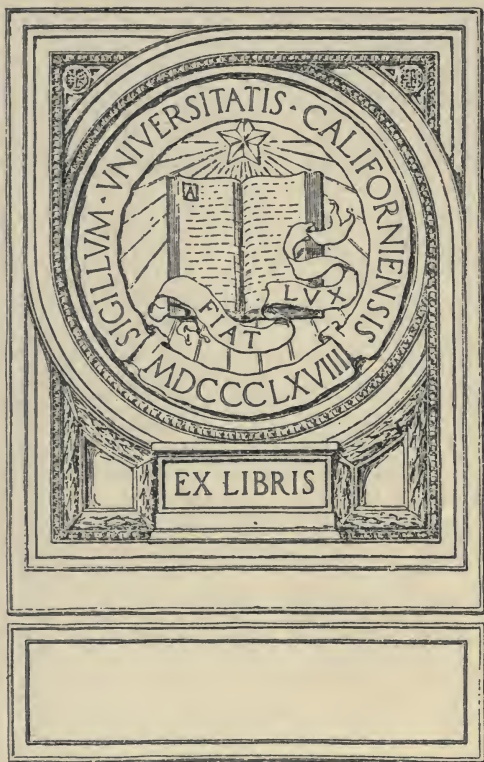


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BUSINESS ORGANIZATION AND ADMINISTRATION

BY

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THE GREGG PUBLISHING COMPANY
NEW YORK CHICAGO BOSTON SAN FRANCISCO
LONDON

HF 5500
D4

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GREGG PUBLISHING COMPANY

G-57-F-10

Made in the United States of America

PREFACE

This book is written in the belief that there exists a need for a text which may form the basis of a short course in the fundamentals of business administration and management and which will bring before the student those bigger business problems upon the proper solution of which success in business largely depends.

In some schools such a course may supplement the work in book-keeping and office practice, while in others it may form an introduction to the more specialized and advanced courses in the field.

Even a bare statement of the most essential facts of business practice is an ambitious undertaking. Much had to be omitted which might have been included. In fact, the most difficult task in the preparation of this volume was the elimination of material.

It is hoped that in this process of trimming, nothing has been pruned away which is absolutely necessary to give the student a picture of the most common business situations.

The references at the end of each chapter are not intended to present a complete list of books on any one subject. The limited resources of most

libraries make it advisable to give only those books which are considered standard, and which are best suited to the needs of the kind of students for whom this book is intended. Teachers may also find these references an aid in planning their own collateral reading.

As will be observed, the references given in connection with the "Questions for Further Study" are usually taken only from one or two of the references mentioned. This is done intentionally, so that these questions may be useful in schools where only a limited number of the most essential reference books can be obtained.

Both sets of questions are to be taken merely as suggestions. They do not by any means exhaust the possibilities. Many other and more vital questions will be brought out in the class discussion which must form an important element in the teaching of this subject.

The teacher's chief task will be to bring the material of the text in intimate relation with the business life of the community. This is no small task, but it would be difficult to find a field of study which offers the teacher a greater opportunity to draw upon the knowledge which the student has unconsciously acquired and to sharpen his powers of observation and analysis.

A large amount of space has been devoted to the problems of labor management and to the payment

of wages. These are at present our most vital industrial problems. Wrong prejudices are more likely to lead to disastrous results in the settlement of these problems than in any other business situation.

If this little volume proves an aid to the teacher in awakening in the mind of the student a critical, analytical attitude toward his surroundings, it will not have been written in vain.

J. ANTON DE HAAS

New York City.

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CHAPTER I

THE ELEMENTS OF SUCCESS IN BUSINESS

Knowledge. The first thing required for success in business is accurate knowledge of business affairs in general, and of the business in which one is engaged in particular.

The old-time business man learned all that he knew about business by "doing." In the same way, the physician and the lawyer at one time prepared for their profession by reading in an office of an established practitioner and by assisting him in his cases. The training which these professional men received in this way was very inadequate as compared with the training students now receive in our medical and law colleges.

The practitioners had poor laboratory equipment, could devote but a portion of their time to the giving of instruction, their own preparation was not any too thorough, their experience limited, and their teaching ability questionable. This inefficient method of training for the professions has been universally abandoned. The business man, however, must still to a large degree depend on the old-fashioned "apprentice" method of training.

Only recently have the schools and universities in the United States undertaken to teach the essentials of business. Their neglect in this respect has led many corporations, industries, banks, foreign trade concerns, and wholesale and retail stores, to establish their own schools. This is unsatisfactory, for it results in an unnecessary duplication of equipment and personnel, placing, thereby, a heavy burden upon business.

The need for better trained men and women in business has become daily more and more apparent to the business man. The high prices of raw material and labor make it more urgent than ever that the entire staff be well trained. Lack of knowledge of methods and processes, lack of training in the keeping of correct records, or in the management of finances, in fact, every lack of knowledge means lessened efficiency, high cost, smaller profits, and possible failure.

The impression that prevails in many places that "nerve" will make one's way is entirely erroneous. To be sure, a certain amount of aggressiveness is needed to press to the front, but a position thus achieved cannot be held unless the "nerve" be backed up by ability and knowledge.

Scientific Attitude. In order to make one's knowledge truly useful it is necessary to cultivate what may be called the "scientific attitude of mind." This means the attitude towards life of one who desires to

know the actual facts and is not satisfied with opinions or offhand guesses.

There is a premium in active life upon arriving at decisions quickly and without loss of time. But frequently conclusions which are the result of careful investigation lead to wiser actions. The scientific mind does not jump at conclusions, its methods may arouse impatience with those who are accustomed to trusting to intuition, but the days of the "rule of thumb" methods are numbered. More and more careful, deliberate action based upon carefully accumulated knowledge is taking the place of quick, snap-judgment, and hair-trigger action.

To take an example in the accounting field. Many business men fail to keep good accounting records and are remiss in the keeping of cost records, and still there is no other way in which accurate knowledge of the condition of a business can be obtained.

The lack of good records lies at the bottom of much reckless price cutting. Many retailers are actually selling goods at a loss from ignorance in regard to the cost of doing business. The recent interest of business men in "uniform accounting," *i. e.*, standardized sets of accounts, is in part the result of the hope that competing firms may, by their adoption, gain a better knowledge of costs. Price cutting which is not based upon accurate cost data results in injury to all firms dealing in the same line.

William C. Redfield, in *The New Industrial Day* (p. 185), gives an interesting illustration of the ignorance of many business men of important aspects of their own business:

Into the office of a large factory in New York State went one day a competitor of the concern who thought it courteous to call upon his rival. He was cordially received by the unassuming owner and finding the atmosphere congenial, began to talk on matters of mutual interest. Being asked whether he had not secured a certain order, he answered in the affirmative, saying that that work was a specialty with him and that he had been able to reduce the cost for material and labor to about eighteen cents each piece. His host said that he had not himself given any special study to that particular article, and that he was very glad to have suggestions.

When the visitor left, the owner crossed the room to his cost-keeper whose eye he had seen twinkling, and asked him what the last lot of these goods cost for labor and material, and was told six cents each. The trouble with the visitor was that he had no realizing sense of his own heavy burden charges, and, ignoring them and forgetting selling cost, he had underbid the man whose actual outlay was but one-third his own. This is but one of many possible illustrations showing that the man who "knows his own business" is often ill-informed about important factors in it.

In every field of business activity there is found the man who is not satisfied until he knows, until he

has discovered, the one best way of reaching his goal, and also the man who is satisfied to trust to his bluff to carry him through, and is willing to follow the rut of precedent. The latter may score an occasional spectacular success; the former builds more slowly for a certain future.

Science is merely an orderly system of collecting information. It is impossible to gather information which will be really useful until the problem is first carefully analyzed and taken to pieces so that the essentials may be separated from the non-essentials. This, therefore, is the first step in all scientific work. First comes an analysis of the problem. The next step is to gather information which is lacking. In gathering this information, great care must be exercised that hearsay and opinion are not taken for accurate facts. Where no facts are available, enough "opinions" should be gathered to make it possible to discover in how far these opinions are likely to be correct, and in how far they are merely based upon prejudice.

The next step is to arrange this information—to tabulate it so that it is possible to arrive at a conclusion. A wastebasket full of facts is meaningless. They should be arranged so that all those which point in one direction are brought together and are offset by those which seem to point to a different solution, very much in the same way as accounting records give a systematic and understandable expo-

sition of a large variety of facts which otherwise would be meaningless. In the interpretation of these facts, the business man will find ample opportunity to use all his knowledge and experience. To sum up the whole matter in simple language, the scientific method as applied to business means:

1. Determine just what it is you want to do.
2. Collect all possible information. Make certain that you collect facts, not opinions.
3. Determine on the basis of this information which is the best way to proceed.
4. Then go ahead.
5. Keep careful records to make it possible to check constantly the results obtained, for in no other way can the efficiency of different methods be compared.

Absolute Honesty. After all, there is a streak of dishonesty in the man who depends on his "nerve" or "bluff." He is parading under false colors; is assuming a knowledge which he does not possess. In dealing with customers, such a man will never admit that he does not know, even in cases where it would be to the interest of the customer to be frank. He is afraid to throw off the mask which he has chosen to wear.

Honesty is the backbone of business; without it no bank can exist; and the retailer depends upon the honesty of his customers as much as they depend upon his.

If anyone doubts whether the world is getting better, let him study the history of business relations. The modern business man is honest and knows that his success depends not upon his being able to squeeze the last penny out of any transaction, but upon the degree to which he serves. Service, dependable service, and absolute honesty, constitute the foundation of all business success. The large firms that supply the nation and many customers in foreign lands with trade-marked goods are evidences of the supreme demand for honesty. A trade-mark is a promise to maintain quality which, if broken, means failure. If any proof were needed that the dictates of our conscience, which prompts us to deal justly and fairly with all men, reveal to us the moral law according to which the world is governed, business experience can furnish that proof. Honesty pays in a business sense because honesty is a fundamental need in human relations. It pays to observe it for the same reason that it pays to observe the law of gravity. Such laws cannot be ignored without disastrous results.

Service. The introduction of the concept of service in business has given all transactions a different aspect. The retailer no longer looks upon the customer as legitimate prey to be exploited to the limit; he considers how he may best please this stranger so that their relations may be permanent. The old

dealer would say, "A sale is a sale," and would not encourage his dissatisfied customers to register their complaints and to return the goods that displeased them. The modern concern says, "If not satisfied, tell us." No sale is successful in the eyes of the modern business man which does not pave the way for future sales.

In order to instill this spirit into the minds of all who are connected with the enterprise, the same spirit of honesty and fair dealing should prevail in the internal relations of the business.

Social Sense. The business man should have a social sense. He should feel that he is performing a social service and that he has social duties. As a dealer, he should be instrumental in building and strengthening ethical standards in the relations between himself and his competitors, and between the business men and the general public. As an employer he should consider himself responsible to society for the treatment he gives his working people, for the wages he pays them, and for their health and general welfare.

A business concern which ruins the health of its workers, which turns them out into the world broken in body and spirit, which arouses through its unfair dealings a spirit of revolt and unrest—such a concern is a social menace. From the point of view of society it were better if such a concern did not exist. The benefits which society derives from its existence can

never compensate for the burdens which it throws upon society.

Human Sympathy. A keen appreciation of social responsibility should go hand-in-hand with a sympathetic understanding of man and his problems.

It is impossible to conceive of a business man who deals only with "things." All business is based upon a relation of man to man in which the goods are but an incident. In the factory or the mine, the physical equipment, the raw material, and the finished product are important. But success is not determined by them, but primarily by the spirit of those who work among them.

A fine factory building, a well-equipped shop, an attractive-looking store building, do not make a successful business, any more than a few buildings, however well equipped, make a school or a university. And just as it is the faculty and the relation between the faculty and the students which make a school, even if there is no building at all, according to the same principle, it is the men and women, and the relation between the managers and the workers in an organization which determine its success.

The ability to awaken in others a desire to co-operate, a realization of a community of interest is a rare quality which is worth more from a business standpoint than the ability to design clever machines or to keep books accurately; for the ability to handle human problems is rarer than the ability to handle

material problems. May not this be the reason why an executive and a salesman usually receive a higher salary than the man who designs or makes the article?

This may not seem just to the one who produces the product. To him the product is the principal thing. Without it, so he says, there would be no salesman and no executive. The producer, the worker, the designer, therefore, believes himself the most essential. But he forgets that the matter may well be turned around. If there were no salesmen there would be no call for the product. If there were no executives there might be no factory organization. A group of machines, a mob of workers, and a pile of raw material do not make a factory. It requires the personality of a true executive to make out of this complex a productive unit. It requires accurate knowledge of processes and of machines, of market demands and of costs. But most of all, it requires that understanding of the motives of men, that ability to see life from their point of view without which it is impossible to establish a successful organization.

The day is past when labor was classed along with raw material and equipment as something bought and paid for, and the control of which entailed no special responsibility. We are now beginning to regard the employer as directly responsible to society for the moral and physical welfare of the human beings who place themselves under his control.

The success of a business man will, in the future, no longer be measured solely by the amount of money he has succeeded in accumulating, but will also be measured by the mark he has left upon the lives of those with whom he has come in contact.

Character. Business success, therefore, in the future more even than in the past, will be built upon character. Honesty with oneself and with others, a demand for the truth about business facts, a sympathetic and fair attitude toward one's associates, a sense of responsibility for one's actions—these are the prerequisites of success.

Summary. Success in business is impossible without knowledge of business in general, and of the kind of business in which one is engaged in particular. This may be acquired by the "apprenticeship" method, or, and this is more economical in time and money, by a preliminary school training. This will shorten the period of apprenticeship. One should cultivate the "scientific attitude of mind"; business men are beginning to realize this. Honesty, more than ever, is a business asset—honesty in dealing with competitors, customers, employees, and with oneself. Service expresses the true ideal of business; it is based on social sense and human sympathy.

REFERENCES

W. C. Redfield. *The New Industrial Day*. The Century Co.

QUESTIONS FOR FURTHER STUDY

1. What is meant by the *scientific spirit in management*?

Reference: Redfield, Chapter VIII.

2. What are the benefits which a business man may derive from a complete knowledge of costs?

Reference: Redfield, Chapters IV, V.

3. What opportunities are open for the study of business in your community? in your state?

TEST QUESTIONS

1. Outline the steps by means of which a business man should reach his conclusions.

2. Explain what is meant by *service* in business, and contrast this new spirit with the attitude that used to prevail. Give an example of some actual experience you have had which illustrates the new and the old spirit.

3. What qualities should a man possess in order to become a leader among men?

CHAPTER II

BUSINESS ORGANIZATION

Modern Business Is Highly Specialized. When someone says that he is "in business," this statement does not convey a very definite picture of what his actual occupation is. All that we know is that he evidently does not belong to the professions; he does not teach, preach, plead cases, or fill teeth; that much we know, but we do not know what he does do. He may sell peanuts, write advertisements, manufacture hats, or build houses.

In this textbook we shall study business in its various aspects. Before we enter upon that study it is necessary that we begin by considering somewhat carefully what we mean by *business*. Studying the anatomy of a worm does not give anyone a knowledge of zoölogy. Not until other animals have also been studied and the relation among them has been pointed out, does a detailed study of any one of them have any meaning.

It is the same with the study of business. First, we must get a bird's-eye view of the various kinds of business enterprises and their relation to each other, before we can derive any benefit from a detailed study of any one of them. The best method to

follow in finding one's way in a strange city is to study the map carefully before venturing out. The present chapter will draw a picture of the business world which will serve as a map to those who desire to find their way in the business world.

The Two Large Classes of Business Enterprises. All business enterprises may be divided into two large classes. First, there are those which produce raw material or change its form, possibly combining it with other raw material, and in that way producing a finished product. Such enterprises are called industrial enterprises. The second is a group of business activities which do not change the form of the products, but are instrumental in passing them from hand to hand and from place to place until they finally reach the consumer. These are called commercial enterprises.

This division into two large groups is based upon a fundamental distinction. An industry changes the physical form of the goods; a commercial enterprise does not, though it may sometimes bring minor changes in the packing and finishing of the goods.

Industrial Enterprises. The industrial enterprises may again be subdivided into two main groups: the extractive industries, and the manufacturing industries. The extractive industries include mining, forestry, agriculture, and fisheries. They produce the raw materials which are used by the manufacturing industries. These extractive indus-

tries, from a business point of view, present interesting problems, quite different from those connected with manufacturing industries.

In later chapters we shall study the various factors which refer to plant location; why it is better to locate a manufacturing plant in one place rather than another. The fact that it is necessary to study this question shows that there is in the matter of location, room for the exercising of judgment.

The Extractive Industries. One may locate a steel plant in Seattle, Pittsburgh, or Philadelphia; a furniture factory in Grand Rapids, or San Francisco; but no such possibility of choice exists in an extractive industry. In order to exploit a mine, to lumber a forest, or to work a farm, one must go where the mine, the forest, or the farm is. The natural resource to be worked predetermines the location of the extractive industry based upon it. This is not, however, the only distinctive feature of this type of enterprise.

To a varying degree, these industries are based on wasting assets; the larger their scale of production, the more quickly they put themselves out of business. In a mine the amount of ore is fixed; every ounce of ore removed is removed once for all, and the mine becomes poorer by that amount. A forest lumbered according to the old-fashioned American method is transformed into a barren waste from which, if situated on a hillside, all good soil is washed away in a few years, rendering it even unsuited to farming.

Every foot of lumber removed leaves the country that much poorer.

To a certain extent this is true of farming. Many sections of the country, renowned at one time for their fertility and great productiveness, are now yielding small crops. The cotton and tobacco fields of the South are not as good as they once were.

The fishery industry faces a similar problem. The destruction of the spawning grounds, coupled with the excessive yearly catch, are rapidly diminishing the fabulously rich fishery resources of both the Atlantic and Pacific coasts.

Conservation of Assets. Well managed, extractive industries take measures to offset the effects of this decrease in assets. In the mining industry such measures take the form of development and exploration. As the old mine gradually nears the point of exhaustion, new veins may be opened up on the same claim, or some other claim in another part of the country may be prepared for production. Such measures perpetuate the industry as a business undertaking, but cannot do away with the fact that physical exhaustion is inevitable.

Forestry, agriculture, and fisheries are in a somewhat different position since they deal with the products of the vegetable and animal kingdom which, if properly cared for, will replenish themselves.

By a scientific policy of reforestation, forests may be made to yield lumber, not once, but indefinitely.

The commercial forests of England, France, Norway, and Germany, are eloquent examples of this. The wonderful forests of our great Northwest are rapidly being destroyed. Bare hills with blackened stumps like so many crosses in a cemetery, mark the path of the lumber mills that work their way further and further into the mountains impoverishing the country. A reforestation policy rigidly enforced upon all owners of timber lands would make these forests permanent sources of wealth to the nation.

The farming industry may also take measures by means of which its permanent asset, land, may not only be prevented from diminishing in productivity, but may actually be improved. By raising the same crops year after year land soon becomes exhausted. Crop rotation, a combination of dairy or chicken farming with the raising of crops, and the proper use of fertilizers are all means of increasing the fertility of the soil. The farms of England, Holland, and Belgium, though cultivated for centuries, are constantly increasing their yield per acre. The farms of the United States are on the whole decreasing their yield. The reason lies in the ignorance of the American farmers of the proper methods of soil conservation.

Better care of our rivers, scientific propagation of fish in Federal and State hatcheries, and rigidly enforced fishing laws may save the fish resources of this country from destruction. These matters are of national concern and it is, therefore, logical that the

private ownership of such resources and the use that is made of them should be rigidly controlled by the Government.

One other element enters in to distinguish the extractive industries. Their operation is always subject to heavy risks. A mine may give out suddenly; a forest fire may destroy millions of dollars worth of timber; storms may raise havoc with the big trees; a drought may destroy all chances for a good crop no matter how carefully planted and cultivated; or a swarm of locusts may clear a field ready to be harvested.

These uncertainties make such industries the basis of much speculation. "Get-rich-quick" schemes are usually associated with mines, while speculation in food products is one of the most objectionable kinds of gambling. The lumber industry is not entirely free from such speculation and fortunes have been made and lost in the industry.

Manufacturing Industries. Manufacturing industries take the raw materials obtained from the extractive industries and fashion them into finished articles. Such industries require a building and more or less elaborate tools and machinery. They use, on the whole, a different class of labor from the extractive industries. These latter need a large number of unskilled laborers of whom no other qualification is asked than physical strength. A manufacturing concern needs as a rule a large num-

ber of highly skilled and intelligent workmen. Extractive industries draw to themselves an army of foreign laborers, many of them unmarried and constantly shifting from one job to another. The manufacturing plants appeal more to the man with a family, who is willing to stay in one place.

This condition is emphasized by the fact that the extractive industries are to a large extent seasonal. They are very active one part of the year and close down during other seasons. This seasonal fluctuation increases the cost of doing business and makes it necessary when borrowing money to borrow for long periods from season to season. It also aggravates the labor question since it forces the workmen to adjust themselves to intermittent work. Cities near mining or lumber camps, or selected as the winter homes of fishermen are notorious for their social instability and for the rough and restless labor element.

Many manufacturing enterprises are also subject to seasonal fluctuations. The clothing trade and the ice and coal trade are of this nature. Driven by the desire to make complete use of the plant throughout the year and to secure a stable, reliable labor supply, many of the seasonal business enterprises are more and more eliminating their seasonal character. They do this by a wise advertising and selling policy, by co-operation with their customers and with their competitors. They may reach the same results by

developing a foreign demand for their goods, or they may undertake to produce two types of products subject to dovetailing demands. The ice business may for that reason be profitably combined with the coal business.

The Commercial Enterprises. Many business undertakings of widely different nature may all be spoken of as commercial enterprises, for they are engaged in facilitating the flow of products from maker to consumer. These enterprises fall into three large classes: (1) marketing or trading, (2) transportation, and (3) financial enterprises.

Those of the first group buy products from a producer to sell them again to some other producer or middleman, or directly to the consumer; or they may act merely as agents for the producers and sell on a commission basis. To this group belong the brokers dealing in produce, lumber, and metals, and also the wholesalers, jobbers, and retailers.

The transportation group consists of such business concerns as railroads, interurban and urban electric roads, and inland and ocean transportation companies.

Financial enterprises include banks, trust companies, stock exchanges, brokerage firms, and insurance companies. The functions of the last two groups are easily distinguished. Transportation supplies the means of carrying goods from one place to another, whether from mine to factory or from

factory to wholesaler or retailer, or from retailer to consumer. The financial enterprises, on the other hand, supply in part at least, the funds needed to enable the various persons to buy the goods they need, either for consumption or for production.

The Relative Importance of These Enterprises. Which one of these various enterprises is the most important? They are all essential. Man cannot get along without food; neither can he get along without shelter; nor can he raise his food without tools.

The manufacturing industries, though producing many luxuries, have made the making of a living easier by supplying man with more efficient tools. Transportation facilities carrying goods from place to place, allow the entire world to share in the products of the most favored spots. The products of the tropics are found in the remotest corners of the globe, while the manufactured products, the lumber, and the wheat of the temperate zones are common necessities in tropical lands.

Without the aid of the various traders such wide distribution of goods would not be possible. The middlemen, so often accused of all the evils in the dictionary, perform a necessary service. The retailer who keeps within convenient distance from every home a well-selected stock of goods, contributes no little to the comforts of life. Who, indeed, would care to return to frontier conditions when once a year the supplies for the family were bought and

stored away? All these enterprises are, therefore, essential and socially valuable, but only so long as they are conducted efficiently and honestly.

Efficiency a Social Duty. From a purely selfish standpoint, middlemen may look upon an increase of their number in the path that connects producer and consumer, as a good thing. It means great profits. From the point of view of society at large, an unnecessary multiplication of middlemen is bad; for all inefficiency is a social loss. If more men are engaged in loading a ship, in cutting down a tree, in selling groceries, or in directing the money resources of the community than are absolutely necessary, the total productivity of society is, by that much, less than its maximum. Ultimately every member of society suffers by inefficiency, for if many men are engaged unproductively, there are just as many mouths to feed, just as many human wants to satisfy, but less goods to go around than when the same men are engaged in productive work.

This consideration may change somewhat our attitude toward the successful business man. The small, inefficient business man is frequently looked upon with sympathy as entitled to our aid and support, while the big, successful man is at times thought to have made his income at the expense of society. Frequently, however, the situation is quite the reverse. The poor business man—or, as the economist would call him, “the marginal man”—is

the culprit. His inefficiency means an increased cost to everybody concerned and an increased profit to the efficient. The poor business man throws burdens upon the banks and the insurance companies; he is frequently responsible for congested freight terminals and for labor unrest. The instability of his business endangers all other business in the same way as a bad fire risk endangers all other buildings in the same block.

Efficiency in business, therefore, is a matter, not of purely individual interest, but of social concern. The greater the efficiency of the link connecting nature and consumer, the more human wants may be satisfied with the same work and capital.

In the pages that follow, various factors affecting the efficiency of business enterprises will be discussed. The discussion will frequently be technical and detailed, for no useful information can ever be imparted in mere generalities. However much the question under discussion may seem to be of importance only to the pocketbook of the individual business man, it should at all times be remembered that individual efficiency and productivity are of direct and intimate concern to society as a whole. The consumer is as much interested in the installation of good accounting systems as the business man and his employees, while a lower selling or transportation cost is of equal importance to producer, middleman, and consumer. There is, therefore,

nothing dismal or materialistic in a study of business problems. It is, in fact, a study of the practical means of increasing human happiness.

Business Analyzed According to Functions. We have discussed the various business enterprises and grouped them according to types. Within each of these types many men are at work in charge of a large variety of functions. There is a great similarity between the functions necessary to operate widely differing types of enterprises. In the first place, a line may be drawn between ownership and operation. In a more primitive organization of society, these functions were combined in one man, and a business was operated by its owner with the aid of clerks and workmen. As the business unit grew, it became necessary to look for funds outside. Many people who have surplus funds are willing to use them productively, but frequently cannot spare the time or do not possess the ability to actively engage in the operation of the concern themselves.

The growth of the corporate type of organization has made it possible for anyone with funds to invest in many business enterprises. But this investment does not carry with it the burden of operation. In modern business, ownership and operation are, therefore, quite distinct. The owners exercise direct control over the finances of the enterprise and direct the general policy, but the operation is placed in the hands of a different group of persons.

In this group we may recognize three large subdivisions: management, administration, and labor. The functions of the management are to plan all processes of operation and to direct the execution of the plan. The labor force, whether in the office or the shop, receives the instructions and orders from the managers and is expected to carry them out. The administrative force acts as a link between the managers and the shop or office; first, in making a record of the orders issued; second, in keeping a record of results; and third, by tabulating this information in accounting or statistical form for the use of the managers.

In few business concerns are management, administration, and execution as sharply separated as the foregoing description might indicate. There is, however, a general tendency throughout the business world to carry through this fundamental division more clearly than formerly.

Departmental Division. Still another subdivision usually takes place according to the various departments of activity which jointly constitute the "operation" of the enterprise. In the manufacturing business this subdivision would logically result in the following departments:

- I. Purchasing. Here is concentrated the buying of raw material; partly finished goods and parts; supplies for the shop, such as oil and waste; supplies for the office, such as typewriter ribbons, paper, glue, and paper clips;

equipment, such as machinery, office fixtures, and small tools.

2. Service. This department hires the workmen, selects them, assigns them to their jobs, trains them for their work, supervises their efficiency, and transfers them to other work if this proves desirable. It cares for the comfort and physical and spiritual welfare of the workers.

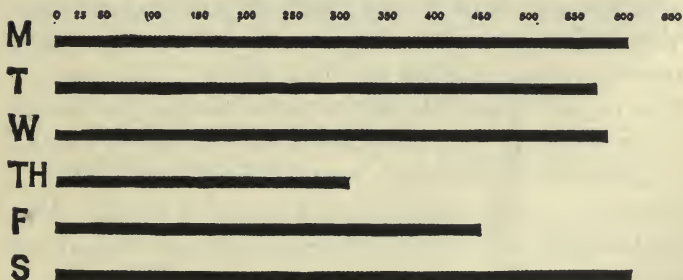
3. Production. In this department the product is made. Usually this department is subdivided into at least the following subdepartments: engineering or drafting department; and the shop with its many subdivisions such as storerooms of raw material, finished stock rooms, tool rooms, powerplant, and the shop proper.

4. Selling. This again may be subdivided into: advertising, selling, correspondence, delivery, and other subdepartments.

5. Accounting. Here the records are kept of the financial relations of the firm with the outside world and with its own employees, and records from which the cost of production of the goods and the efficiency of various departments and persons may be determined.

Organization Charts. The human mind has difficulty in grasping abstract statements. For this reason, more and more general use is made in business of charts and graphs. There is usually connected with the accounting department a department charged with the duty of collecting data regarding operation and administration, and of presenting them in such a form that the conclusions to which

they point may be quickly grasped. This is called the statistical department. One of its functions is to present monthly, weekly, or even daily charts, showing in pictures the facts of interest to the different managers or executives. To give an example: In case the manager for whom the graph is being prepared is primarily interested in selling, many such pictures may be drawn; one to show the total sales of the department day by day; another to show the daily records of individual salesmen; and another to give the relation between certain advertisements and the sales that took place as a result. So each department gives rise to many such data which may form the material for graphical representation. To illustrate how much more easy it is to grasp a picture than to understand figures, compare the following:



Production during the week ending June 25th of
No. A 3 spools

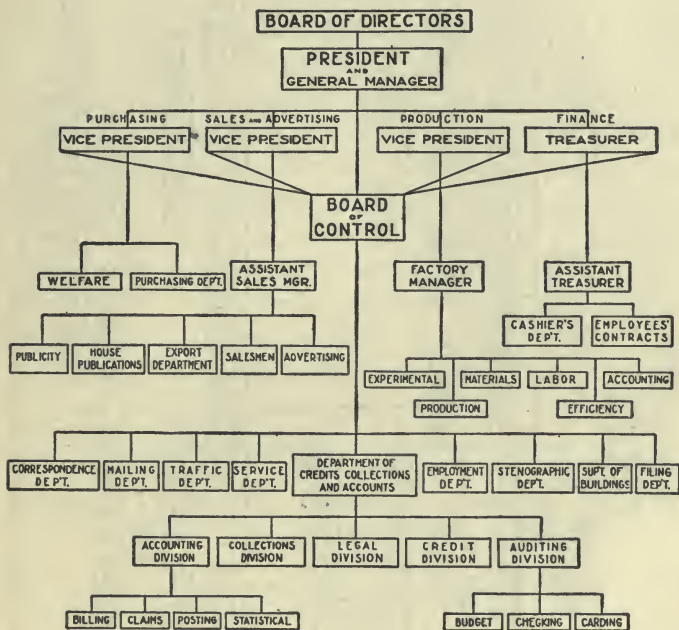
M	T	W	Th	F	S
606	575	585	310	450	610

From the above chart it is immediately clear that something happened on Thursday, possibly a breakdown at the end of the day.

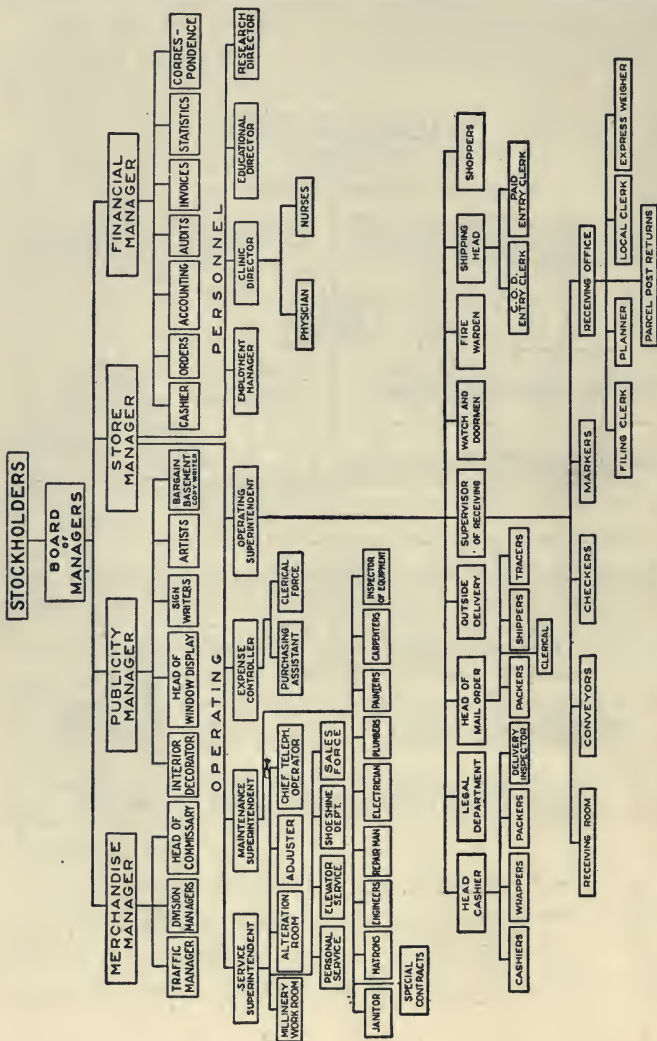
This statistical department is also charged with the duty of preparing organization charts. These charts have several purposes. They show in a clear picture the departments of which the organization consists, their functions, their interrelations, and the flow of authority. In many large concerns such charts are kept either on the walls of all offices or under a glass plate upon the desks of executives and departmental managers. Two such organization charts are given below.

Besides satisfying the purposes indicated below, such charts may also be a source of inspiration to the younger members of the organization. They see the steps by which they may climb into the better positions. One good way to attain success is to prepare oneself constantly for the "job ahead." No matter how far we progress in life, there is always some better position ahead. By preparing conscientiously for the position, the day's work seems more worth while; it becomes a stepping-stone to something better. Our widened horizon makes us see our position as the man above is seeing us.

Many large industrial corporations make it a definite policy to require of each man that he train some other employee to be his "understudy." This accomplishes a variety of beneficial results. The



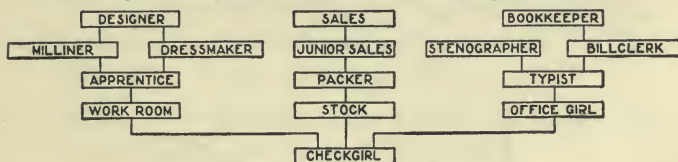
ORGANIZATION CHART OF A LARGE MANUFACTURING CONCERN IN THE MIDDLE WEST



ORGANIZATION CHART OF A LARGE DEPARTMENT STORE ON THE PACIFIC COAST

younger man realizes that he is in line for promotion and this encourages him and gives him enthusiasm in his work. The higher employee no longer feels himself indispensable and begins to look to the job ahead of him. Enthusiasm and alertness in this way communicate themselves to the entire organization. Moreover, should some employee resign or fall sick there would be no difficulty in filling his place. The National Cash Register Company attributes a large part of its *esprit de corps* to this policy of training understudies. In order to aid employees in obtaining this vision, some firms prepare promotion charts, showing in a simple way the steps by which it is possible to climb to higher positions.

Lord and Taylor, a large department store in New York City, has prepared the following chart:



PROMOTION CHART OF A LARGE DEPARTMENT STORE

In the pages that follow the questions hinted at in the present chapter will be discussed in more detail.

Summary. There are two classes of business enterprises, industrial and commercial. The industrial enterprises change the form of goods, while the commercial enterprises facilitate exchange and produc-

tion. Industrial enterprises may again be divided into manufacturing and extractive industries, each with its own characteristics. Commercial enterprises may be trading, transportation, or financial undertakings.

Within each business three main functions may be recognized: management, administration, and labor. The following departmental divisions are frequently found: purchasing, service, production, selling, and accounting. Organization charts are used to enable the members of the organization to understand their relation to the organization as a whole.

REFERENCES

- H. C. Adams. *Description of Industry*. Henry Holt and Company.
- C. C. Parsons. *Business Administration*. A. W. Shaw Company.
- J. R. Smith. *Industrial and Commercial Geography*. Henry Holt and Company.

QUESTIONS FOR FURTHER STUDY

1. What does Smith mean when he says: "Civilization is a product of adversity"?

Reference: Smith. Chapter I.

2. Explain the difference between "money crops" and "supply crops."

Reference: Smith. Chapter II.

3. Show by examples how the application of science to agriculture has changed methods and crops.

Reference: Smith. Chapter XVII.

4. What is the position of an auditor, and in how far do his duties differ from those of a controller?

Reference: Parsons. *Business Administration*. Chapter II.

5. In what respects does the classification of industries given by Adams differ from the one given in this chapter?

Reference: Adams. Chapter II.

6. What, according to Adams, are the marks of a successful industrial organization?

Reference: Adams. Chapter VII.

TEST QUESTIONS

1. Give a definition of extractive industry, manufacturing industry, commercial enterprise. Give two examples of each type of enterprise.
2. What problems of labor and financial management are characteristic of the extractive industries?
3. Are these problems entirely absent from the manufacturing industries and the commercial enterprises?
4. Explain why individual efficiency is a social duty.

CHAPTER III

THE PROPRIETORSHIP OF A BUSINESS

The Owners May Be One or Many. Where a man owns his business, as a great many of the small business men do, we speak of "single ownership," or "sole proprietorship." A few of the large and nationally known concerns are also of this type. John Wanamaker continued to be the sole proprietor and manager of his large department stores until a few years ago, when he changed the form of ownership.

The advantage of this kind of ownership is that the owner receives all the profits which are made, but this is offset by the consideration that he must also bear all losses. Legally, he is responsible with all that he possesses—whether invested in his business or not—for all debts contracted, either private or on account of his business. Another drawback of sole proprietorship is that the growth of the business is often limited by the amount which the owner is able to invest. Except where the business prospers to an unusual degree, and where the owner is willing to leave a large portion of these profits in the business—thereby increasing his investment year by year—single proprietorship may seriously hamper growth. At best, reinvesting earnings is a slow process

and may often be too slow to allow normal development to take place.

In order to obtain additional capital so that the enterprise may expand, the proprietor may take in one or more partners. The basis upon which he will take in these coproprietors will depend upon the agreement he is willing to make. A contract will be drawn up in which the amount which each is to invest in the partnership, the form of this investment, whether cash, goods, or good will, the way in which profits and losses are to be divided, are carefully stated. Usually there is also a clause dealing in detail with the exact method according to which the partnership may be dissolved. It is easy to see that taking in partners is a serious business which should not be done without careful consideration. All partners, except those who have been declared "dormant" or "non-acting," have a right to control the affairs of the concern; and are legally empowered to bind the partnership by their contracts.

In selecting partners it is, therefore, necessary to find not only someone with the necessary amount of cash, but also someone who commands the entire confidence of the owner. It is bad enough to be held responsible with all that one possesses for debts contracted in the pursuit of one's business, as in the single proprietorship, but it is worse to be held responsible for the debts contracted for the undertaking by all other partners. This "unlimited liabil-

ity" is a serious drawback to the partnership. Another objection is that death or insanity or even voluntary withdrawal may disband the partnership, thereby leaving the original owner high and dry, frequently unable to carry on his business alone and unable to find another partner. Where a large amount of capital is needed, a correspondingly large number of partners would have to be taken in, thereby increasing the dangers and difficulties mentioned.

The Corporation. The corporation presents itself as a form of ownership which has all the advantages of a partnership, and few of its disadvantages. A partnership is a contract between persons, but this personal element disappears in the corporation, which is an artificial person created by law. In most states, corporations may be created under the "general corporation law" of the state by fulfilling the requirements of the law and by filing the necessary papers with the proper state officials, usually the Secretary of State. If all conditions have been fulfilled, a "charter" or "articles of incorporation" are issued.

The capital of a corporation, corresponding to the net investment of the single partnership or proprietorship, is once for all fixed and cannot be changed without sanction from the same state officials. For the sake of convenience, the total capital is divided into shares of equal amounts. These are called *shares* or

shares of stock. Those who contribute to the capital are called *stockholders* or *shareholders*. The stockholders are, therefore, the owners of a corporation in the same sense as partners are the owners of a partnership.

In most states at least three incorporators are required before a corporation can be formed. They must have agreed to take a certain percentage of the total capital stock—this is called *subscribing to the stock*—and before business can be begun a certain percentage of their subscription must be paid into the treasury of the company. In applying for incorporation the following information must, as a rule, be submitted:

1. The name and purpose of the organization.
2. The amount of capital and classes of stock to be issued.
3. The location of the main business office.
4. The expected life of the corporation—as a rule a corporation has perpetual life.
5. The names and addresses of the incorporators.

Advantages of Incorporation. One of the principal advantages of the corporation is found in the limited liability of its shareholders. Usually their liability is limited to the amount which they have invested, though in rare cases, as in the case of banks, “double liability,” *i. e.*, liability for twice that amount is found. This limited liability feature is one of the reasons why state regulation is needed. The interests of the creditors must be given some degree of

protection, though it may curtail the freedom of action on the part of the owners.

The fact that such corporations may have a perpetual life, and that their existence is not affected by changes in the body of owners is another important advantage over the partnership, the life of which is always more or less uncertain. The stockholders or shareholders, though dividing the ownership of the undertaking, have no right to act as agents for the corporation unless duly appointed to such office. This protects against recklessness or lack of business knowledge on the part of a joint owner, a danger which is very real in the case of a partnership.

All that a stockholder is expected to do is to supply funds, to cast his vote at the stockholders' meetings, and to take the profits, if any, while in case of loss he knows that he cannot lose more than he invested. A corporation may, therefore, look for its shareholders among people of all kinds; the possession of a certain amount of cash is the only necessary condition of membership. The fact that losses are limited to a known amount makes the finding of persons able and willing to become part owners of a new enterprise comparatively easy.

To sum up the advantages of incorporation—they are found principally in:

1. Limited liability.
2. Separation of ownership and management.
3. Life independent of changes of ownership.

Launching a Corporation. Until the incorporation is completed the incorporators are "jointly and severally" liable for all debts contracted by them for the undertaking. A considerable amount of business may have to be transacted before incorporation can be started. It may be necessary to pay down money to secure patent rights or mining claims or to secure options for later purchases. Lawyers may have to be engaged to advise in respect to legal complications which are likely to arise in connection with such ownership and rights. These and a multitude of other details must be attended to before it is possible to incorporate.

It is not an easy matter, therefore, to launch a corporation. Few people know how to go about it, and still fewer are willing to face the risks involved. The making of all preparations and the finding of the initial finances is called *promotion*, and the men undertaking it are called *promoters*. Some individuals, usually men with experience in finance and a knowledge of the financial world, make a specialty of promotion. They are professional promoters. Some of these promoters have incorporated their business and have added a staff of engineers. By so doing they are able to give expert advice concerning the feasibility of engineering projects, and to undertake the construction and initial operation of such propositions.

Sometimes a group of bankers forms a *syndicate*, which is a kind of temporary partnership for the pur-

pose of investigating, organizing, and starting a new corporate enterprise. The promoters are usually rewarded by being made shareholders of the new corporation. In other words, they are given a *block of stock* or are allowed to purchase it at a low figure.

The Value of Stock. Each stock- or shareholder receives as evidence of his part ownership a *stock certificate*. In this stock certificate is stated the number of shares of stock which it represents. The *par value* of the stock is also indicated. By *par value* is meant the sum which represents the proportionate amount of the total capital which the share represents. If the total capitalization is \$100,000 and one thousand shares have been issued, then each share is said to have a par value of \$100. Whether it is worth \$100 is another question. The value of the shares is determined not by their par value, but by the actual or expected earnings of the corporation and by the proportion of these earnings which will fall to each share. The larger the number of owners, the smaller the share which each one will receive.

Different Classes of Stock. There is still another factor which influences the value of shares of stock. Each share of stock has three important rights. These are:

1. A vote in the election of the directors of the company.
2. A share in such part of the profits as the directors have declared can safely be distributed.

3. A share of the total net assets of the corporation in case of dissolution.

As long as all shares are on the same basis and none have special rights, all shares of stock will have the same value, but sometimes there exist different kinds of stock. Certain shares have privileges and rights which are not given to the ordinary or *common stock*. Stock with special privileges is called *preferred stock*.

Preferred Stock. How It Arises. Why should such special privileges be given? Because under certain circumstances this may be the only way of saving the company from ruin. Suppose that a company has been operating for some time and is desperately in need of more capital. It is found impossible to "float," *i. e.*, sell more common stock. The directors do not judge it expedient to borrow money for the undertaking, for that would mean shouldering a heavy responsibility for the regular payment of interest. Preferred stock opens the way to meet this difficult situation. It means taking in more co-owners, and it means granting them rights which the original owners do not possess. It means a sacrifice of rights on the part of the original owners, but it is a necessary sacrifice. Money must be secured and cannot be secured in any other way.

Or it may be that the company has borrowed money in the past and has difficulty in meeting its obligations. The creditors may have been given

rights when the debt was contracted, which might make it uncomfortable for the company. This is usually the case where *bonds* have been issued. These will be discussed in a later chapter, but at this place it may be explained that *bondholders* are long-time creditors of a company who usually have the right to take possession of the property and to operate it for their benefit, or to sell it and to apply the proceeds on the debt, whenever the company fails to pay either interest or principal at the agreed time. Should the company fail to live up to its obligations, the bondholders may take steps to exert their rights.

In such cases preferred stock forms a compromise. The original owners sacrifice rights and the old bondholders sacrifice some of their rights to become privileged part-owners rather than wreck the concern by insisting upon exercising their full legal rights. Preferred stock may also arise as a result of the desire to give old part-owners who have invested different amounts in cash an equal voting power in the management of the corporation.

Different Kinds of Preferred Stock. Almost all preferred stock is *preferred* as to dividends, *i. e.*, in respect to the profits to be divided. There is an almost unlimited number of ways in which this special privilege may be granted. The agreement may be that no dividends are to be paid to the *common* until the *preferred* has received a certain amount, say 6 per cent, after which all may share equally or in some

other way agreed upon. As an example may be given the preferred stock of the Chicago and Northwestern Railway. This stock draws 7 per cent which is followed by 7 per cent on the common. After this the preferred draws another 3 per cent before the common draws anything further.

In some cases preferred stock is *cumulative*; this means that a minimum of yearly dividends is guaranteed. If during any one year no dividends are paid, they must be paid at some later time before the common stockholders can receive any share in the profits. This may be an agreeable arrangement for the preferred stockholders, but it is easy to see how this affects the common stockholders. They may have to go without income for years and years. As far as they are concerned this arrangement is almost, though not quite, as bad as borrowing money and facing the heavy yearly interest burden.

The situation grows worse when preferred stockholders are granted additional voting privileges. This is frequently the case, and it is not uncommon for the control of the corporation to pass practically into the hands of the preferred stockholders. Sometimes provision is made by which control passes into their hands automatically, as soon as dividends have not been paid for a certain number of years, say four or five years, in succession.

Preferred stock may also have special rights in respect to the final division of the property in case of

dissolution or—and this is becoming more and more common—an additional inducement may be held out in the privilege of exchanging the preferred for common stock, in which case a share of preferred may be considered the equivalent of one and a half or even two shares of common.

The Control of the Corporation. All stocks have, as a rule, the right of vote in the stockholders' meeting. All internal affairs are usually regulated by a set of by-laws which supplements a charter or constitution. In these by-laws the following matters are included:

1. Time, place, and manner of calling and conducting stockholders' meetings.
2. The number of stockholders which constitutes a quorum.
3. The manner in which absent stockholders may cast their votes. This is called voting by *proxy*.
4. The method of electing directors, their duties, and qualifications.
5. The method of appointing the officers, their duties, and qualifications.
6. The salaries and other methods of compensation of directors and officers.

The stockholders elect a board of directors. The duties of the directors are to appoint competent officers, to direct the general policy of the corporation, and to examine the periodic statements submitted to them in order to inform themselves in regard to the honesty and efficiency of the managers.

In this country, directors are seldom paid for their services except by a nominal fee for expenses. In other countries directors receive a percentage of the profits and they are, therefore, more vitally interested in the success of the concern even though they may hold only small amounts of stock.

The only way in which a stockholder can control the management of an undertaking of which he is a part-owner, is by casting his vote in a general stockholders' meeting for those directors who, he believes, will best look after his interests. But one stockholder can do very little unless he has a very large amount of stock, and even then he can do very little unless in some way he succeeds in getting a majority vote in the meeting. This does not necessarily mean 51 per cent of the total shares issued; much less than that is sufficient as a rule, for the stock is frequently held by widely scattered owners who never even consider attending a meeting. And even if they did attend, the fact that they do not "pull together" makes it possible for any small and well-organized group with a comparatively small amount of stock to dominate.

Frequently a group of financiers control the vote not only by means of their own holdings, but also by means of the proxies of absent voters. A *proxy* is a document by means of which the stockholder authorizes someone else to vote for him.

The Payment of Stock. As will be remembered, the stockholders who agreed to buy stock when the company was first started were said to *subscribe* to this stock and are consequently called *subscribers*.

Since the company is not permitted by law to begin operation before at least a certain percentage of the amount subscribed has been paid in, the stockholders must make this initial payment before the concern begins to be a "going concern."

The board of directors may decide—if the by-laws do not compel them to follow a certain course—how much money the stockholders shall pay, and whether this sum shall be paid at once or in regular or "called" installments. Stock paid for at one time or paid in regular installments is *full-paid stock*. When only a partial payment has been made the remainder continues to be an obligation on the part of the stockholder. Such stock is called *assessable stock*. The element of uncertainty connected with this type of stock does not make it very popular. When one buys such stock one never knows whether he is buying a source of income or a debt. A corporation will, therefore, as much as possible issue only stock which is full-paid.

Where only a partial cash payment is received the difference is frequently made up by a transfer of property, tangible or intangible, such as patent rights or "services." It is clear that in such a case the difference between the par value of the stock and

the actual cash payment constitutes the supposed value of the services or of the property transferred. The board of directors or the promoting syndicate determines these values. If their estimates are far above the actual value, then the par value of the issued stock and consequently of the authorized capital is in excess of the actual value of the assets both tangible and intangible. Such a condition is called *overcapitalization* and the stock thus issued is called *watered stock*. This may or may not be a bad thing. Frequently an overcapitalization is fully justified by the advantages resulting from incorporation, such as more favorable credit and better management.

Transfer of Stock. The original owners do not always care to continue to invest their money in the corporation, and may wish to sell their ownership rights to others. This they do by selling their *stock certificates*. Since each one of these stock certificates bears the name of the original owner and the certificate is, moreover, recorded in his name on the books of the company, it is necessary that he formally relinquish his right. This he does by placing his name on the back of the certificate, in other words, by *indorsing* the document. This is called *indorsement in blank* because the name of the new owner has not yet been inserted. Such a certificate may now pass from hand to hand and not until the time comes when dividends are to be paid is the name inserted of the person, who at that time is the owner. The

certificate is then sent to the transfer agent of the corporation, who will make the transfer on the books and will issue a new certificate.

It is important that this transfer take place in proper time, for dividend checks are mailed to the persons whom the books show as owners of the stock. In order to prevent the issuing of more certificates than are authorized, a registrar is appointed who checks the certificates issued by the transfer agent.

Dividends. After the net income for the year has been determined by the accountants, the directors decide how it shall be spent. They may decide to divide it among the stockholders or to retain all or a part of it in the business. Since the capital of the corporation has once for all been determined in its articles of incorporation, this addition to the permanent investment must appear under another heading on the balance sheet. The account which almost invariably receives this charge is *surplus*. It is customary never to use this surplus for the payment of dividends, though there is no legal reason why it should not be so used in the future.

By not receiving the dividends during any one year the stockholders suffer a loss in income, although this loss is offset by the increase in value of the corporation's assets. Where the body of stockholders is fairly constant the benefit fully offsets the sacrifice, but in the case where the body of stockholders is constantly changing, the financial interests of the present

group of owners are sacrificed, while some future group will reap the results. The stockholders may disapprove, but they have no way of forcing the directors to pay them a definite part of the profits made. The declaring of any dividend is entirely at the option of the directors.

As a rule the directors will try to maintain a steady rate of dividend. Their act of withholding a portion of the net income may be merely the result of that ideal. Stocks with a fairly uniform rate of dividend find a more ready market and prepare the way for other issues of securities by the same company. It is usually unwise to pay out all the profits made in a year of exceptional prosperity. Careful financial management should be wide awake to possible hard times to come, especially in industrial concerns, which as a rule are subject to great fluctuations. A portion of the profits laid aside in times of prosperity may aid the company to face the dangers of a temporary slackening of business. A company may be seriously troubled through a neglect of this principle.

As a rule dividends are paid in cash. In order to have sufficient cash available at the right time the company must take proper measures to convert enough assets into cash in advance of declaring dividends. Where this is neglected it may become necessary to borrow money to pay dividends.

It may not always be wise to pay dividends in cash. There may be reasons for hiding the actual profits

made from the general public. A withdrawal of cash may seem unwarranted, especially where a large accumulation of surplus has taken place. In such cases *stock dividends* may be paid. This means that the stockholders are presented with one or more shares of additional stock. It will usually be necessary to increase the capitalization in order to accomplish this. This means *capitalizing the surplus*, a legitimate act as long as the surplus has resulted from actual earnings and not from the marking up of assets.

The stockholders' position is not thereby improved. Whether one owns shares with a face value of \$200 out of a total capitalization of \$100,000, or \$400 worth out of a capital of \$200,000 makes no difference. In either case one is entitled to 1/500 of the total profits. The principal advantage is derived from the fact that the market price of each share of stock has become less and that it is, therefore, more readily sold.

Summary. The proprietorship of a business may be in the hands of one person or of many. In the latter case, the business may be organized as a partnership or as a corporation. The advantages of the corporation are limited liability, perpetual life, separation of management and ownership. Frequently corporations are organized by promoters. Evidences of ownership are called shares of stock; the corporation issues certificates which are recorded by a regis-

trar and a transfer agent. There are many different kinds of stocks. They may be divided into two large classes: common and preferred. Preferred stock may be preferred as to dividends, voting rights, or assets. The payment of dividends is in the hands of the board of directors.

REFERENCES

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QUESTIONS FOR FURTHER STUDY

1. It is said that stockholders in the United States are largely ignored in matters of management by the directors of the corporations. Can you discover a reason why this condition is not found to the same extent elsewhere?

Reference: Lough. Part I, Chapter III.

2. What is the purpose of a voting trust?

Reference: Lough. Part II, Chapter V.

3. What are some of the effects of lack of care in the declaring of dividends?

Reference: Lough. Part IV. Chapter XIX.

4. Describe in detail the operation of an underwriting syndicate.

Reference: Lough. Part III, Chapter XV.

TEST QUESTIONS

1. What are the advantages of the corporate organization?
2. What is meant by the terms par value, cumulative preferred, proxy, subscription?
3. How is a corporation controlled?
4. How is stock transferred?
5. What are the advantages of regular dividends?
6. What is a stock dividend?

CHAPTER IV

FINANCING AN ENTERPRISE

(Working Capital)

The Owned Capital of an Enterprise. As we have seen in the preceding chapter, a business may be owned singly or by a group of owners who form a partnership, a joint stock company, or a corporation. These owners supply the necessary funds with which to launch the enterprise.

The first decision which the owners face is how the money shall be spent. They must buy land, buildings, possibly machinery and tools, and they must invest in raw material, labor, and fuel. It is no easy matter to decide how much should be allowed for each purpose. Many concerns are doomed to failure from the very outset on account of an unwise decision of this important question. There is a great temptation to buy a fine building and the very best and most expensive machinery, in a belief that this means "starting out right." As a matter of fact, it may mean the very opposite.

Working Capital and Investment Capital. Many farmers are said to be *land poor*. By this is meant that they are landowners and, therefore, not poor in the ordinary sense of the word, but that they are poor

in that they have no ready cash—no working fund. When they are called upon to pay wages or to buy necessities they must borrow from others.

Many a business concern is in somewhat the same condition. A large proportion of the funds or *capital* of the enterprise is tied up in buildings, machinery, and more or less permanent equipment; and little is left to operate the enterprise, and to carry on enough business to keep the capital investment working at full time. Business failures frequently result from this mistake in the distribution of the available funds.

When starting a business undertaking two questions must, therefore, be studied. The first question is how much money is needed to start the enterprise, and the second question, of equal importance, is how shall these funds be divided between *capital investment* and *working capital*? Only experience can determine how much working capital is needed in a business. Certain fundamental principles may be recognized.

Factors Influencing Amount of Working Capital Needed. The Turnover. One of the most important factors in determining the amount of working capital needed is the rapidity of the turnover. By *turnover* is meant the number of times the stock is sold out and replenished. If a store has on hand goods valued at \$100,000, that is to say, valued at sales price, and the total sales of the store amount to \$300,000 a year, then it is said that this store turns over its stock three times a year. By investing

\$100,000 in goods the store has done a business of \$300,000. Another store, with a less rapid turnover, in order to do a \$300,000 business must tie up more than \$100,000. Take, for example, a concern which turns its goods over twice a year instead of three times. This will necessitate a constant investment in stock of \$150,000. Hence, it is plain that in order to carry on the same volume of sales the second store needs more working capital.

This same situation exists in a factory. Here it is the rapidity with which the goods are sold out of the warehouse which determines the amount of money tied up in stock. But still another factor enters in. The stock which must be kept on hand to fill orders promptly is one factor, the length of the manufacturing process is another. The more time is consumed in that process the more "goods in process" are on hand at any one time in the factory. These, too, represent investment. The raw material which must be kept in stock is still another factor. If the factory is forced to import its raw material in large quantities from foreign countries the raw material investment may be very considerable. When, on the other hand, the factory is placed near a source of material so that any needs may be quickly filled and hardly any raw material need be carried in store, then the investment in raw material becomes negligible. In a factory the amount of funds tied up in stock is, therefore, determined by the rate of turnover of finished

goods, the raw material stores, and by the length of the manufacturing process.

Seasonal Production Requires Large Working Capital. Whenever anything interferes with the regular turnover of a business, stock will accumulate and tie down a large share of the ready funds. Seasonal industries such as the straw hat industry and the clothing industries, must manufacture their goods months in advance in order to have them in the required quantity when the summer demand comes. This means that the working capital is, to a very large degree, tied up in finished goods. The amount of business the concern can do at the time the temporary demand is active is limited beforehand by the amount of capital the concern has been able to invest in finished goods during the manufacturing months of the slack season. If firms always paid cash for their purchases of raw materials and other necessary goods, such seasonal industries would require huge amounts of working capital. A firm does not necessarily supply all of its working capital.

Borrowing Working Capital. Trade Credit. It is not always necessary to pay cash for goods. It is possible to postpone payment or, as it is called, to buy *on credit*. By this method a business may be carried on with comparatively little actual working capital. Retailers buy their goods in this way from the wholesaler or manufacturer, and are allowed to postpone their payment long enough, so that they

frequently sell the goods to the consumer before payment is due. They can then use the money they received from their customers to pay the wholesaler or manufacturer.

Manufacturers may in this way buy their raw material, or partly finished goods, and wholesalers may again make similar terms with manufacturers. This buying on credit is most frequently found in the retail trade, and here principally among the small concerns, while the manufacturer uses this method of raising funds but very little. There is a good reason for this. Although by this method a business may get along with little working capital, the firm which allows the postponement of payment does not grant this privilege for nothing.

The price of goods sold on credit is always higher than that of goods sold for cash. This needs no explanation for it is clear that the firm selling on credit is really lending its working capital to its customers. The more a firm is compelled to sell on credit and the longer the period of credit that must be allowed, the more working capital that firm will need, and the higher is its cost of doing business. It is, therefore, fair that the buyer should pay for the privilege of receiving credit. When in ordinary business transactions goods are sold for, say, \$1,000 and 5 per cent off for cash within ten days, and the custom of the trade is that credit shall run no longer than two months, then it means that the business firm is pay-

ing a very high rate of interest for the credit accommodation. The choice lies between a cash payment of \$950 at the end of ten days or a \$1,000 payment fifty days later. For the fifty days use of \$950 the buyer pays \$50 or the equivalent of 37.89 per cent a year.

Whenever the buyer is able to find some cheaper way of obtaining temporary use of funds other than this commercial credit, it will pay him to make use of it. For this reason large department stores and well-established manufacturing firms, who can borrow money readily and at a moderate rate, find it to their advantage to pay cash for their purchases and to borrow money in some other way.

Borrowing from the Banks. One method of securing cash with which to pay for purchases is to borrow from the banks. The banks are always on the lookout for safe investments in which to place their surplus funds, but they must be careful in the choice of their investments. The principle that should always be borne in mind when investing the funds of a commercial bank is that in order to be able to meet demand obligations one must invest only in *liquid loans*. A liquid loan is a loan which has only a comparatively short time to run and which is *self-liquidating*. This last feature is quite as important as the first. A loan is self-liquidating if the funds are spent in such a way that the transaction itself, providing everything goes as anticipated, will produce the means of its own payment.

Take an example: If a man borrows, with the desire to buy an automobile, that loan cannot be called a liquidating loan, for the possession of the machine does not increase his power to repay the sum borrowed. As a matter of fact, the cost of the gasoline, tires, and repairs may place him financially in a less favorable position than before the purchase. But let him invest the same amount in a delivery wagon for his store and the situation is different. Now he can please his customers by quick delivery, he may be able to do away with two or possibly three horse and wagon outfits, or he may be able to expand his business in another section of town. The delivery equipment increases his earning capacity. This is a self-liquidating investment. It earns money to pay for itself.

In order to make certain that the funds of the bank are invested in the right kind of loans, the banker will request from the prospective borrower a statement of his business and of the purpose for which the loan is to be used. A model of such a statement as prepared by the Federal Reserve Board is attached opposite this page and should be studied carefully. If properly filled out such a statement gives a clear picture of the financial condition of the firm in question.

The Promissory Note. After the banker has studied this statement and has been convinced from conversation with the borrower that the purpose for which

STATEMENT OF.....
BUSINESS.....ADDRESS.....
To.....BANK OF.....

We make the following statement of all the assets and liabilities of our firm at the close of business on and give other material information for the purpose of obtaining advances on notes and bills bearing our signature or indorsement, and for obtaining credit generally on present and future applications.

[illegible]

Merchandise. On what basis valued, cost or market.....
 Finished \$..... Unfinished \$..... Raw \$.....
 If any goods are on consignment, state amount and circumstances

Sales and Profits Last Fiscal Year. Net Sales

Net profits \$.....
Accounts and Notes Receivable. If any past
 due or doubtful state amount and circum-
 stances.....

If any amounts are due from members of the firm, employees, branches or similar sources, state amounts and circumstances.

Bonds and Stocks. State general character and if readily salable at value stated.....

Insurance. Fire, on Buildings \$.....
Merchandise \$.... Life, in favor of firm \$...

Contingent Liability. As indorser \$.....

As guarantor \$.....No accounts have
been sold or assigned except as follows....

Accounts and Notes Payable. If any are past due state amount and circumstances.

During last fiscal year current liabilities were at maximum (\$.....) on..... and at a minimum (\$.....) on.....

Mortgages and Other Liens. State due date of mortgages and on what assets a lien....
....Is mortgage a lien on any current assets?.....

If any other liens on assets, state amount
and circumstances.

Reserves and Depreciation. State what provision is made.....

We hereby certify that the foregoing figures are taken from the books of our firm and that they and the statements contained on both sides of this sheet are true and give a correct showing of our financial condition.

Signed this.....day of.....191..... Firm Name.....

By.....

(OVER)

Member of Firm

DATE OF PARTNERSHIP.....DATE OF EXPIRATION.....

GENERAL PARTNERS			SPECIAL PARTNERS		
NAME	Amount Con- tributed	Net Worth Outside This Business	NAME	Amount Con- tributed	Partner Until
.....					
.....					
.....					

If the firm has any branch offices state location and how accounts are handled.....

If the firm or any member is connected with any other business, state nature of the business and extent to which interested.....

What is the practice of the firm in regard to trade discounts?.....

Are books audited by a certified public accountant?..... Give date of last audit.....

Location and Description of Land Owned	Estimated Value	Assessed at	Mtgd. for	Insured for
.....				
.....				
.....				
.....				

Title. The legal and equitable title to all pieces of above described real estate is solely in the name or names of one or more of the members of the firm, except as follows.....

(The balance of this space may be used for printing any questions desired to be asked amplifying statement of condition as shown on opposite page)

the loan is to be spent is sound, he will consent to the loan. Before the money is handed over to the borrower he must prepare an evidence of his debt which is to be left with the bank until redeemed. This evidence will usually take the form of a promissory note.

The form of such a note is simple. No stated form is required. It is necessary, however, that it contain the name of the person to whom the payment is to be made, the date when the payment is due, the amount of the payment, the date when the contract

was made, and that it is signed by the person making the promise to pay. When any of these features are absent the note is not complete and there may be doubt as to its legality. (See model below.)

\$	Palo Alto, California,	19	No.	
On _____ after date, for value received, I, we, or either or us, promise to pay to				
the order of _____ \$ _____				
at the FIRST NATIONAL BANK OF PALO ALTO, CALIFORNIA.				
_____ DOLLARS				
With interest at eight per cent. per annum _____ interest payable quarterly, and interest and principal not paid at maturity to draw eight per cent. annual interest, both principal and interest payable in United States gold coin. The makers, endorsers and guarantors of this note agree to pay a reasonable attorney's fee if suit is brought hereon, and hereby severally waive presentment of payment, notice of non-payment, protest and notice of protest, and diligence in bringing suit against any party thereto, and auresies consent that time of payment may be extended without notice thereof. And a failure to pay interest within ten days after it becomes due, shall cause the whole sum to become due and payable.				
Due _____				
P. O. _____				

As a rule there is included in the note a statement in regard to the interest to be paid on the money thus obtained.

Such a promissory note may be single-name paper, which is the case when one signature appears on a note, or it may be a *joint note*, in which case two or more signatures appear. A joint note may be two-, three-, or four-name paper, according to the number of signatures.

In order to make a note *negotiable* or transferable, it is necessary to add to the name of the one who is to receive the money the words "or order," or "or bearer"; this makes it possible for the creditor to transfer his right to some other person. This trans-

fer takes place through *indorsement*, and may be accomplished by affixing the signature of the payee on the back of the document. This is called a *general* indorsement to distinguish it from a *specific* indorsement, which names the person to whom the payment is to be made.

The Security Back of the Loan. In the case of the notes just described, the only security which the bank has is the honesty of those who signed the note. The banker may know these men and may have confidence in them; he may be certain that the borrower and his friends may be perfectly willing to pay when the note falls due, but the question is whether the borrower will be able to pay. A loan is, then, only safe when the borrower combines ability with willingness to pay.

There is nothing in the ordinary promissory note that gives any information about this ability to pay, nor any certainty in regard to the way in which the money is to be spent. The banker may, therefore, ask some additional security. This security is called *collateral*. A very common method is to deposit with the bank a security of bonds, stocks, or other valuable documents acceptable to the bank. These must be properly indorsed or made, as it is called *good delivery*, for unless so indorsed the bank could not sell them as the need arose.

Many merchants offer their accounts receivable as security for loans. An *account receivable* is an ac-

count upon the books of the borrowing firm which shows that a certain amount of money is due from another concern. This method is becoming quite general. In a way it is efficient and safe, but it may give rise to fraud for it is possible for a business man to assign his accounts receivable to one bank and then to use these same accounts as a basis for direct loans from some other bank.

Another method to obtain ready money is to borrow money on merchandise. Manufacturers frequently place their raw material in warehouses and borrow money from banks and give the warehouse receipts as security. The amount which the banks are willing to lend will be determined by the character of the merchandise. Only merchandise for which there is a steady and fairly constant market can be made the basis of loans, while perishable goods form very dangerous security.

Banks never lend up to the total value of the merchandise, they hardly ever lend more than about 80 per cent, and usually less.

Merchandise as Security for Loans. It is not necessary to keep the merchandise stored away in a warehouse while it is being used as collateral. Goods may move freely from one part of the country to another, or even to foreign countries, and may change hands several times, financed all the while, not by those who deal in the goods, but by banks.

Agricultural products travel that way from farmer to domestic or foreign buyer. The farmer usually needs and demands cash for his product. He has in all probability accumulated a large bill with his local grocery and dry goods stores during the period between harvests, and he may also have to pay for his farm machinery which he bought earlier in the year on credit. He needs the means of payment, therefore. He demands cash or a deposit in his favor with a bank against which he can draw checks. The traveling buyers have only a limited amount of cash at their disposal. They may be able to pay cash for the crops of one or two farmers, but if they had no other way of obtaining cash they would have to wait with further purchases until the crops had been moved to some central market like St. Louis, Chicago, or Kansas City, and sold to the middlemen who form the link between these large primary markets and the consumers.

The local buyer is able to borrow from the bank by the following process: he draws a bill of exchange or draft on the commission men or wholesaler at the primary market to whom the products are consigned.

Bills of Exchange or Drafts. A *draft* is an order to pay a specified amount of money to a specified person at a definite time.

This order to pay is worth money and the banks are willing to buy it. Since the money is not due immediately but only after a certain period of time,

and since a certain amount of risk is also involved in the transaction, the banks will charge a fee for this service. This fee is deducted in advance, so that a draft of, say, \$1,000 which is due three months later may not bring much more than \$985. The difference between the face value of the draft and the amount actually received, in this case \$15, is called *discount*. Discount is calculated like interest on the basis of a certain percentage a year. In the example the discount charged was 6 per cent.

The security back of this draft may be merely the reputation of the firm on which it is drawn. Frequently the merchandise which forms the basis of the transaction is given as a collateral. The banks do not receive the goods themselves, but instead a receipt of the railroad company, called a bill of lading or waybill, which is evidence that a certain quantity of grain or cotton or some other kind of product has been shipped. The railroad company will only make delivery of the goods against return of this bill of lading. The bank receiving this document is, therefore, certain that the goods will not be released without its knowledge, and will not hand this valuable document to the firm upon which this draft was drawn, until certain that payment has been made, or until some satisfactory arrangement has been made for payment at some future date.

A draft may be a *sight draft*, which means that it is payable upon presentation, or it may be a *time*

draft. A time draft is a draft payable on a certain day or a certain length of time after being presented, *after sight*.

The Acceptance. The firm upon whom a time draft is drawn may, upon presentation, *accept* the draft. The acceptance is made by writing across the face of the draft the word *accepted*, with the signature of the party accepting. Usually there is also added the date and the place where payment is to take place. The draft is then called a *trade acceptance*. Sometimes banks will accept drafts for their clients against a moderate fee. Such drafts are known as *bank acceptances*.

Acceptances are not used very much in the United States, but they are very commonly used in England. The Federal Reserve Board has at various times suggested the more general use of this method of financing transactions.

The accepted draft is an evidence of a live business deal. As a rule such documents arise as the direct result of the sale of goods. Such a transaction is very likely to be self-liquidating. An accepted draft is, therefore, readily discounted at the bank and may even be sold in the open market. This is done in other countries to a very large extent. Many firms which have funds temporarily available for a short-time investment, find in the buying of these acceptances a way of employing their idle cash safely. This safe kind of commercial paper, therefore, aids in

mobilizing resources of the community which would otherwise lie idle.

The banks momentarily unable to invest in commercial paper thus *lend their credit* by accepting the draft, after which it will be readily bought in the open market. This situation illustrates better, perhaps, than any other banking transaction, that a bank's main function is to exchange unknown credit for known credit, thereby greatly facilitating the processes of exchange.

The Credit System. As a result of the use of credit, either trade credit or banking credit, a merchant is enabled to get along with little working capital. He can buy more than his actual cash would allow. He can expand his business, the volume of his goods on hand, and his sales, way beyond his cash resources. He can expand as long as the banks and merchants continue to have confidence in his ability and honesty. Only when they begin to doubt his ability "to swing the deal" is a man's growth retarded. A merchant's progress is no longer limited by what he possesses in the way of money, but by his ability and energy. In so far the credit system is far superior to a system under which no one can engage in a new transaction until some other transaction has been completed and has yielded its proceeds.

The only danger in the credit system lies in the fact that men are inclined to be overoptimistic. They carry others along with their enthusiasm, and

as a result merchants will sometimes *overbuy*, *i. e.*, overreach themselves, and they may then find it impossible to make good their promises of future payment. It is claimed by some that optimism and pessimism run in waves, and that periods of overbuying are followed by periods of depression, when everyone is afraid to allow further postponement of payment. Everyone owing money will then try to sell, with the result that business becomes disorganized. Prices decline sharply, banks are called upon to produce cash, and a panic results. The only way in which such a panic can be avoided is by a limitation and a careful scrutiny of new credit, and an extension and gradual liquidation of the old credit. If given time the situation will right itself.

The Note Broker. Much of the commercial paper is sold not directly to banks but through *note brokers*. These are men who have made a special study of this kind of investment, and are in touch with banks in different sections of the country. The bank, to a large extent, relies upon the judgment of the broker from whom it buys commercial paper and is thereby saved the time and expense of an investigation. The notes range in value from \$2,000 to \$200,000.

The Credit Man. It is very difficult to know whether to allow credit to a certain person or a firm, and for what amount. In all large commercial concerns and also in many banks there is a special official who is charged with the duty to decide these difficult

problems. He is called the *credit man*. The credit man gets his information through various channels. He may obtain it through the traveling salesmen of the firm who are required to report upon such matters, and who gather their information from observation, and from conversation with the customers and others acquainted with the local business conditions. Some credit men place very little confidence in these reports because salesmen frequently lack the knowledge and the analytical mind necessary to come to sound conclusions in credit matters.

He may get his information from the banks. This method cannot be very successful for more than one reason. The bank does not necessarily know the financial condition of the firm, but more than that, even if the bank did know, the relations between bank and customer are somewhat of a private nature, and banks often feel that they would be committing a breach of confidence in giving the information asked for.

The next method is to use the reports of the mercantile agents. There are two important agencies in the United States: R. G. Dun and Company, and the Bradstreet Company. Both of these agencies investigate the credit of firms and individuals, and gather data regarding their business experience and reputation and the amount of capital invested. The information collected by these agents is published in books issued quarterly to subscribers. These volumes

contain some 1,900,000 names arranged alphabetically under the names of the cities. Behind the names of the firms appear symbols constituting the *rating*, which indicate the estimated net worth of the firm and its past record of business ability and honesty. The symbols of R. G. Dun and Company are arranged as follows:

KEY TO RATINGS

LEFT-HAND COLUMN		RIGHT-HAND COLUMN			
	ESTIMATED PECUNIARY STRENGTH	GENERAL CREDIT			
		<i>High</i>	<i>Good</i>	<i>Fair</i>	<i>Limited</i>
AA	Over \$1,000,000.....	AI	I	1½	2
A+	Over \$750,000.....	AI	I	1½	2
A	\$500,000 to \$750,000.....	AI	I	1½	2
B+	300,000 to 500,000.....	I	1½	2	2½
B	200,000 to 300,000.....	I	1½	2	2½
C+	125,000 to 200,000.....	I	1½	2	2½
C	75,000 to 125,000.....	1½	2	2½	3
D+	50,000 to 75,000.....	1½	2	2½	3
D	35,000 to 50,000.....	1½	2	2½	3
E	20,000 to 35,000.....	2	2½	3	3½
F	10,000 to 20,000.....	2½	3	3½	4
G	5,000 to 10,000.....		3	3½	4
H	3,000 to 5,000.....		3	3½	4
J	2,000 to 3,000.....		3	3½	4
K	1,000 to 2,000.....		3	3½	4
L	500 to 1,000.....			3½	4
M	Less than 500.....			3½	4

When only a credit rating appears this line of credit designation applies.....

I 2 3 4

(*d*) Where an italic *d* in parenthesis precedes a rating, it is an indication that one or more of the partners in the firm are liable in another or other firms, and the responsibility is in that sense divided, **THUS:**

(*d*) B+I.

The absence of a Rating, whether of capital or credit, indicates those whose business and investments render it difficult to rate satisfactorily. We therefore prefer, in justice to these, to give the detailed reports on record at our Offices.

Ratings of branch houses should be looked up at Headquarters also

R. G. DUN & Co.

These general reports may be supplemented by means of special reports from the agency which are furnished to subscribers upon request and are much more detailed and specific.

In addition to these commercial agencies there are established a number of co-operative credit information undertakings, such as the various local credit men's associations, which exchange information upon requests from members.

Summary. The amount of working capital needed in any business depends upon many factors: the rapidity of turnover, the terms of sale and purchase, the length of the manufacturing process, and the seasonal fluctuations. More working capital may be secured by:

1. Postponing payment on purchases.
2. By borrowing from banks on promissory notes, with or without collateral (collateral may be stocks, bonds, or merchandise).
3. By discounting a bill of exchange or draft. Such drafts are made more marketable by acceptance, either by merchants or banks.

Note brokers act as middlemen between borrower and lender. The credit man supervises loans and performs an important service in the business enterprise.

REFERENCES

Same as preceding chapter. Additional references:

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J. E. Hagerty. *Mercantile Credit*. Henry Holt and Company.

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QUESTIONS FOR FURTHER STUDY

1. Can you see any good reason why in figuring the turnover it is necessary to use sales price or retail price, both for the total sales and for the valuation of stock on hand?

Reference: Prendergast. Chapter VIII.

2. How much does a firm lose when it can earn 10 per cent a year on its working capital, and it neglects to take advantage of a cash discount of 6 per cent within ten days on a purchase of \$2,000 payable in 60 days?

3. How is a note protested?

Reference: Cleveland. Chapter VII.

4. How are credit accounts collected?

Reference: Cleveland. Chapter VII.

5. What are the special financial problems involved in selling on installments?

Reference: Lough. Part IV. Chapter XVII.

6. Explain how the experience of the Westinghouse Electric and Manufacturing Company illustrates the necessity of extreme care in the investment of capital funds.

Reference: Lough. Part IV, Chapters XVI, XVII.

TEST QUESTIONS

1. It is sometimes said that a society where all payments are made in cash is a "static society" and that a society where transactions are carried on by credit is a "dynamic society." (Static means stationary, not subject to expansion. Dynamic means growing, expanding.) Can you explain this statement?

2. Enumerate the various ways in which a merchant may secure the use of more working capital.

3. What are the different kinds of security which one may offer a bank when making a loan?

4. What is a trade acceptance and what a bank acceptance?

5. What are the duties of a credit man and how does he secure his information?

6. What is meant by a credit rating?

CHAPTER V

FINANCING AN ENTERPRISE

(Borrowing on Long Time)

Problems of Financing a Growing Business. A business may be seriously handicapped and even in danger of financial failure from an insufficient amount of working capital. But as we have seen, many avenues are open to supply the need by means of borrowed money.

A firm is also handicapped when it has insufficient capital investment, when its factory is too small, its delivery equipment inadequate, or when its machinery is out of date. The effect is not likely to be as disastrous as when the working capital is insufficient and will in most cases be confined to a checking of the further development of the enterprise. The owners, anxious to supply the undertaking with the necessary funds, may follow two methods. They may borrow on long time, or they may enlarge the amount of proprietorship funds, either by investing more themselves or by inviting others to become part owners.

Advantages of Borrowing on Long Time. Borrowing has one advantage which the other method does not possess. It supplies new capital without taxing

the resources of existing owners, and it does not increase their number, which would result in a decrease in the share of the total profits falling to the original owners.

Suppose that a firm, whether a single ownership, partnership, or corporation does not matter, has \$100,000 capital and is making 10 per cent on its investment a year. Suppose that the business demands an investment of \$150,000, and suppose that the firm then makes 9 per cent on its total investment. It must then be plain that the original owners would have been wise to secure the addition in capital by borrowing money at 5 or 6 per cent, rather than to invite in new shareholders or partners. Had they invited in new owners then they would have reduced the yearly income on their original investment from \$10,000 to \$9,000. By borrowing funds at the rate of 6 per cent a year they improved their financial returns, for of the total earnings which amount to \$13,500, only 6 per cent of \$50,000—or \$3,000—goes to those who supplied the new funds; \$10,500 is, therefore, left to the original owners, who instead of receiving 10 per cent on their investment now make 10.5 per cent.

Disadvantages of Borrowing on Long Time. There is, however, one great disadvantage attached to this method of raising funds. The yearly interest charge may become a heavy burden upon the concern. The owners of a business have no right to demand any-

thing as a return from a business unless it is earned, and in case of a corporation, not unless the board of directors have declared the earnings available for distribution. It is different with the interest payment on borrowed money; this falls due every year or every half year or quarter, whether the business prospers or not. If anything goes wrong, this payment may become a heavy burden and may lead to disaster.

Need for Security. Nor will it be possible to obtain money on loan for a long period without offering good and unmistakable security. The situation is quite different from securing working capital. The mercantile loans or bank loans discussed in the last chapter are all for short periods—thirty, sixty, and ninety days. A keen business man can look that far ahead, or at least he believes he can, which amounts to the same thing. When a loan is asked for ten, twenty, fifty years or even longer, too many uncertainties enter in which make it necessary to ask for good security. This security is usually given in the form of a special right or lien on a specific piece of property, sometimes on property already in existence, at other times on property to be bought with the funds made available by the loan. The owners thereby sacrifice the right of free disposal of their property.

The Mortgage. This right or lien is usually evidenced by a contract called a *mortgage*. A mortgage

is a contract of sale, but a conditional sale which becomes automatically void upon the payment of the loan with interest upon the date of maturity. The loan itself is evidenced by a promissory note, in every respect like an ordinary note of that kind, but at the bottom of which are affixed the words, "This note is secured by mortgage of even date herewith." The amount borrowed, the rate of interest, the maturity of interest and principal, are all mentioned in the note. What is commonly called a mortgage consists, therefore, of two documents, the contract of conditional sale, and the promissory note.

Should the borrower fail to pay interest as agreed upon or should he fail to pay the principal when due, then the holder of the note and the mortgage has the right to take possession of the property and to operate it for his benefit or to sell it as the case may be. This is called *foreclosure of the mortgage*.

The Bond Issue. As long as the amount of money which is involved is not very large the borrower will not have very great difficulty in finding someone to lend him the funds, provided the security offered is above question. One reason why a comparatively high rate of interest is charged for such loans is that mortgages are not readily marketable. They are for odd amounts and the security is only locally known. The larger the amount, the more difficult it becomes to find anyone willing to invest that much in one kind of security.

This objection is met by the subdivision of the promissory note into a number of convenient denominations such as \$100, \$500, or \$1,000 each. Such notes are called *bonds*. The only difference, then, between a promissory note secured by a mortgage, and a bond secured in the same way, is that the bond is one of a series all of which together take the place of the promissory note.

The Trust Company. When there is one promissory note, the lender holds the note and the mortgage. The mortgage or conditional sale is recorded at the courthouse, and the lender may feel certain that no other loan will be made which may endanger his rights. It is different when instead of one note there are a large number of bonds, and when these are sold in widely scattered places. The first problem is who shall hold the mortgage, and the next problem is who shall see to it that no more bonds are issued than are called for in the agreement.

The trust company here steps in to fill this need. This trust company must not be confused with the trust organizations referred to so frequently in the newspapers, such as the tobacco trust, the liquor trust, or the steel trust. The trust company here referred to is a banking institution. It differs from a commercial bank in that it does not usually handle checking accounts, but deals principally in time deposits and long-time investments. It performs, however, the services of a bank in bringing together the

borrower and the lender, and in lending its name, reputation, and credit.

Usually a trust company is appointed to represent the lenders, to act in the nature of a trustee, though this function may be performed by other institutions or by a private individual. The duties of the trustee are to hold the mortgage, which in the case of a bond issue is usually called a *deed of trust*, to see to it that no bonds are issued in excess of the value of the loan to be consummated, and to protect the interests of the bondholders. From this it might be inferred that the trustee is appointed by the bondholders. This is not usually the case. In the case of corporation bonds the trust company is, as a rule, appointed by the corporation.

Closed and Open Mortgages. Usually, when selling bonds secured by a mortgage, the amount to be sold is publicly announced, and it is agreed that even though the value of the property may far exceed the amount of the loan, no additional bonds shall be issued under the same mortgage. This is called a *closed mortgage*.

Sometimes, however, in order to leave an opening for raising funds in the future on the same security, the amount to be issued is not definitely limited and may be increased at a later time. This is called an *open mortgage*. Railroads sometimes issue bonds in this way and limit the amount to be issued by a fixed

rate per mile of track. Such open mortgages may lead to many abuses.

Once a bond issue has been sold against a closed mortgage on a piece of property, it is possible to use that same security again for the same purpose. The right to a first claim on the security, however, cannot be taken away from the original bondholders; they hold the first mortgage bonds, while later issues based on the same security will be known as second, third, or even fourth mortgage bonds. The later issues do not in this case affect the rights of the preceding ones.

Equipment Trust Bonds. A mortgage or deed of trust on immovable property is but one of several ways of offering security to the bondholders. Equipment trust bonds are bonds based upon the security of equipment, such as machinery, railroad cars, street cars, or locomotives. Such bonds usually arise as follows: Suppose a street car company needs new cars but has no available funds. It must then borrow the money. A trustee is appointed to buy the cars, to issue bonds to finance the purchase, and to lease these cars to the street car company. The trustee may be a trust company or may be a corporation formed solely for this purpose. The cars remain the property of the trustee and are merely leased to the company in order to protect the bondholders. The yearly rental to be paid by the company must cover the interest due to bondholders, expenses of adminis-

tration, and enough more to accumulate within the period of life of the cars, a fund sufficient to pay off the principal of the debt.

Collateral Trust Bonds. Another type of bonds exists which bears very close resemblance to the promissory notes discussed in the preceding chapter. These are the *collateral trust bonds*. They are issued against a deposit of collateral. This method of issuing bonds is often used by public utility companies. Many railroad systems are composed of a number of branch lines. In order to concentrate and sometimes in order to acquire the ownership of the obligations of these subsidiary lines, railroad companies frequently place the bonds of these lines in the hands of a trust company, and issue new bonds against them as security.

The well-known credit of the large or parent company frequently causes these collateral trust bonds to sell for a higher price than the value of the collateral would justify.

The Income Bond. What makes bonds secured by the methods just described attractive as an investment, is the fact that they hold out guarantees both in regard to the regularity of income and to the ultimate repayment of the principal. Income bonds, though secured as to the principal, hold out no promise of a regular rate. They receive their income only if it is earned. In so far they are no better than a share of stock, except for the mortgage lien. As a

matter of fact, the income bond is a good deal less desirable than a share of stock, for the stockholders will postpone payment of interest on these bonds as long as they can, either until the bonds mature, or until enough has accumulated to allow the stockholders to share in the division of income. The bond may wait a long time for a return and does not hold out the possibilities of a large return in the future. A stockholder as part-owner, shares in the profits, a bondholder can never get more than the interest promised him in the bond.

The Debenture Bond. While the income bond gives no certainty in regard to income, the *debenture bond* fails to give the certainty in regard to principal which other bonds offer. A debenture bond is no other than a promise to pay a certain amount of money at a certain time and to pay interest for its use. In most cases the debenture bond is protected by some special right or power which is intended to guarantee regular payment of income. Usually a clause is inserted in the bond stating that the principal becomes due automatically upon default in payment of the interest.

The Life of Bonds. The life of bonds varies greatly. Some are issued for short periods of five or ten years and others for fifty years or longer. As a rule, industrial companies do not issue bonds for longer than about twenty-five or thirty years. In many cases, companies will *refund* their bonds at maturity.

When a favorable interest rate can be secured the company may prefer not to withdraw the money from business, but to pay off the old loan with the proceeds of a new bond issue. This process is called *refunding* a loan.

The total debt represented by bonds is called the *funded* or *permanent* debt. Short-term loans may be referred to as *unfunded*. The only difference between these two classes of liabilities is the length of the period for which the loan is made.

The Price of Bonds. Suppose that in order to raise \$100,000 a thousand bonds of \$100 each are issued; how much interest must be promised in order to sell these bonds for \$100 each? That depends first of all upon the interest which other loans like it are offering, and also upon the confidence which the public, or the small group of possible investors, has in the security offered. The less confidence they have in it, the higher the interest rate that must be offered in order to persuade them to pay \$100 for the bonds. This \$100 is called the face value of the bonds because it is the amount printed on the face of the certificate. When a bond sells for its face value we say that it sells *at par*.

Many bonds sell below par. This may result from a combination of causes. In most cases it will indicate that at the same rate of interest other and safer security can be found. It is interesting to note that to the company which issues the bonds, selling below

par is quite as expensive as promising a higher rate of interest. That the company sells below par rather than raises the interest rate may be merely the result of miscalculation.

Suppose that the issue referred to above of one thousand bonds of \$100 each would sell at par when promising 6 per cent. Then it is certain that the price would decline below par if only 5 per cent were offered. How much below cannot be determined until we know the life of the bond. The reasoning of the lender of money, *i. e.*, the investor who buys the bonds, is as follows: "I can get 6 per cent on my money on perfectly good security, as good as of any issue like it promising 6 per cent. I am, therefore, interested in investing in this bond issue, but only on condition that I can make 6 per cent on my money. Suppose now that the investment were forever, that the bonds never matured, then I have only my yearly rate to consider. I want 6 per cent, or \$6 on every \$100. One of these bonds pays \$5 a year; that means an equivalent of 6 per cent on \$83.33. Leaving the question of the principal out of consideration, therefore, as far as yearly income is concerned, that bond is worth \$83.33."

He can afford to pay more, however, because when he buys the bond he not only buys income, but also \$100 sometime in the future. In other words, he buys an addition of \$16.67 to his invested capital. The sooner this event takes place, the more he will be

willing to pay for the bond. Bond buyers will, therefore, increase the amount they are willing to pay with regard to the date of maturity of the bonds.

In buying bonds the investor considers, therefore, two things: First of all the *rate*, that is, the rate of interest promised; but of most direct interest to him is the *yield*. This is the actual rate of interest earned by the money invested in the bond when bought at the current market price. The yield consists of two factors: First, the yearly return on the investment resulting from the regular interest payments; and second, the difference between the price paid for the bond and the par value, expressed in terms of a yearly payment for the period ending at the date of maturity of the bonds.

In order to figure this yield it is necessary to use difficult algebraic formulas and we shall not enter into that question here. For the use of investors and bankers many bond tables are available from which one may read off quickly the net yield of bonds of almost any market price, rate, and maturity. When bonds are selling above par the yield may be calculated in a similar way. This yield will then be less than the promised rate of interest.

The Repayment of Bonds. Upon the borrower rest two responsibilities. He must pay the interest regularly and he must be prepared to pay off the principal when the bonds fall due. Many corporations are compelled to refund their bonds because they have

made no adequate preparation for paying off their debt at maturity.

When the security upon which the bond issue rests remains unimpaired or increases in value, failure to provide for redemption is not a very serious matter though it may lead to difficulties. A railroad keeps up its roadbed by constant repairs and renewals, while the right to use the roadbed, *i. e.*, the franchise, is usually perpetual and increases in value year by year. A mortgage on a roadbed is, therefore, excellent security and refunding can take place comparatively easily.

The situation becomes different when the security consists of assets which decline in value. Declining or depreciating values are: rolling stock of a railroad or street-car line, mining property, forest lands, houses, and machinery. Where such security is offered as collateral, two conditions must be fulfilled: first, the bonds must not have a longer life than the estimated life of the assets; second, during the life of the bond a fund must be accumulated which will make redemption at maturity certain. Such a fund is called an *amortization fund* and the process of accumulation is called *amortization*. Here again, compound interest calculations must be used to determine what yearly sum shall be set aside to accomplish the desired end.

Summary. The problem of securing the necessary funds for permanent investments, *i. e.*, capital in-

vestments, is also important. These funds may be secured by taking in new partners, which means an increase in the claimants when profits are to be divided, or by borrowing on long time. The latter is often to be preferred. It may be necessary to give security. A mortgage is such security. Where large amounts are needed a bond issue may be floated. There are various types of bonds. They differ according to the security offered for the payment of interest or for the ultimate redemption of the loan. The life of bonds varies but is usually more than ten years. The factors which influence the price at which bonds will sell are: condition of the money market, rate of interest and kind of security offered, and life of the bonds.

REFERENCES

The same as the preceding chapters.

QUESTIONS FOR FURTHER STUDY

1. What various methods are open by which capital funds may be increased?

Reference: Lough. Part III, chapter IX.

Cleveland. Chapter VIII.

2. Enumerate and explain the character of the various kinds of long-time paper.

Reference: Cleveland. Chapter VIII.

3. What are the chief advantages of entrusting the administration of bond issues to a trust company?

Reference: Cleveland. Chapter XIII.

TEST QUESTIONS

1. What is the chief disadvantage of borrowing on long time?
2. Describe what documents make up what is usually called a mortgage?
3. What is a trust company?
4. Enumerate and explain the character of the different types of bonds mentioned in this chapter.
5. What factors determine the price of bonds?
6. What will be the effect of an increase in the average rate of interest upon the price of bonds?

CHAPTER VI

FINANCIAL INSTITUTIONS

The Bank. Many institutions and business undertakings place their resources and financial experience at the disposal of the business men and aid them in financing their business. Among these institutions the banks have a first claim to our attention. There are two classes of banks: commercial and non-commercial. Commercial banks are of the greatest interest to business men. These are banks which confine themselves largely to short-term transactions. They logically become the depository for accounts subject to check, and aid in the financing of domestic and foreign business transactions by discounting commercial paper.

There are a large number of financial institutions which are classified as non-commercial banks. These are:

1. Loan and trust companies
2. Savings banks
3. Insurance companies

The Commercial Banks. The relations of the commercial banks to the business world have been discussed in the chapter on Working Capital. Their main function is to aid business by their credit

facilities, to mobilize the financial resources of the community, and to receive on deposit funds momentarily idle.

It is very important that business men should understand the essentials of the operation of a bank. Commercial banks may be national, state, or private. National banks operate under a national charter, state banks under a state charter, while private banks are unincorporated. The large private banks are engaged mostly in the promoting and financing of enterprises and either do not carry on any commercial banking business or do so only incidentally.

Large commercial banks consist of many departments. One prominent New York City bank is composed of the following departments: New York City accounts, out of town accounts, credit, new business, foreign business, securities, operation, and auditing departments.

The chief executive officers are usually a president with a number of vice-presidents. They direct the policy of the bank and constitute the link between the outside world and the bank proper. The operation of the bank is entrusted to a cashier and a number of assistant cashiers. They are assisted by a large number of clerks and tellers.

The Making of a Deposit. When a new customer presents himself at the bank and desires to make a deposit, *i. e.*, to open an account, he is directed to the cashier, assistant cashier, or one of the vice-presidents,

whichever one of these is in charge of new customers. He must be properly introduced by a customer in good standing. The bank looks upon each customer as a potential borrower, and it is therefore important that none but reliable people be allowed to open accounts.

The depositor has a right to issue checks. Since the handling of such checks and the keeping of the customers' accounts requires the time of the bank's employees, and is therefore costly, banks usually require a minimum deposit. In case accounts are allowed to fall below this minimum, a charge is made for the services of the bank. Such a minimum may be as low as \$25, but in some banks is as high as \$5,000. The banks figure that unless the deposit is large the interest which the bank can earn by using this money as a basis for loans does not offset the cost of handling the account.

The depositor now makes out a signature card which is kept as a record in the bank to enable the tellers to compare it with the signature appearing on the checks. If the bank does not use "due care and diligence" in making payment, and it should pay a check with a forged signature, the bank would have to bear the loss.

The next step is to make the deposit. The customer must fill out a deposit slip upon which the various kinds of cash items which may be deposited are listed separately. He inserts his name and the

date and presents the slip at the receiving teller's window with the money, checks, or coupons which he intends to deposit. This deposit slip is a valuable record which the bank keeps as evidence that a certain amount was deposited. Should any difficulty arise, the slip made out by the customer himself and accepted as correct by the bank would quickly settle the question.

The customer receives as his receipt a pass book. Formerly this pass book was presented at the bank once a month, or less frequently in order to enable the bookkeeper to enter the withdrawals and to balance the book. Practically all banks now use the *statement* which is a monthly account of deposits and withdrawals, and which is sent to each customer with the canceled checks for comparison. The pass book continues to serve as a receipt for deposits.

In case the depositor expects to leave the deposit undisturbed for a long period, he may notify the receiving teller that he does not want to open an account "subject to check," but desires to make a *time deposit*. The bank agrees to pay interest on such deposits and issues a receipt called *certificate of deposit*. It is usually understood that no interest is to be paid unless the money remains undisturbed for a period of three months. Interest is sacrificed on all withdrawals made before the end of that period.

In case the depositor desires to use the deposit with the bank to pay a debt in another city and he

fears that his own check will not be acceptable there, he may ask for a *cashier's check* for the amount, or he may write a check himself and have it *certified* by the cashier. In both cases the amount of the check is charged to his account as a withdrawal and the check becomes a direct obligation of the bank.

The Receiving Teller. The receiving teller sends the deposit slips to the individual bookkeeper at the end of the day, or in blocks or batches at stated intervals during the day, but first he makes a record of these slips to enable him to make out at the end of the day a *receiving teller's proof*. This is a sheet upon which are listed the different kinds of items received; cash, notes, checks, etc. Their aggregate amount must of course be the same as the total of all the slips. If any of the items have been sent on to other departments of the bank, the total amounts received by these departments plus what is left in the teller's cage must equal the amount of the deposit slips.

The Individual Bookkeeper. The individual bookkeeper receives the deposit slips and uses them to make entries on the individual accounts. These are accounts with depositors or individuals, hence the term *individual bookkeeper*. He also receives all checks drawn by customers of the bank; these are called *own checks*. In all cases, therefore, a payment made by check between two depositors in the same bank results merely in two bookkeeping entries in the individual bookkeeper's department. One entry

to decrease the balance on the account of the customer by whom the check was drawn, the other to increase the deposits of the customer in whose favor the check was made out. In large banks there are many such individual bookkeepers, and to facilitate their work the individual ledgers are made of loose leaves and split into a number of ledgers of convenient size.

The Paying Teller. The paying teller pays checks drawn by customers of the bank against their accounts. He also cashes many other items, such as bond coupons, as an accommodation to customers. His is a very difficult position, for once a payment is made, mistakes are not easily corrected. It is different with a receiving teller who may correct a mistake discovered after the depositor leaves the bank. It is therefore considered a promotion for a receiving teller to be made paying teller.

The paying teller starts the day with a certain amount of cash in his cage. As he makes his payments throughout the day and his cash dwindles he replenishes it from the vault or from the cash which the receiving teller sends him. At the end of the day the paying teller makes out the *paying teller's proof*. In his case all canceled checks and other items upon which he has made payment must show a total equal to the amount of cash which has disappeared from the cage.

The canceled items are sent to the individual bookkeeper in so far as they represent payments made on account of depositors of the bank; other items are sent to the various departments where they belong. If they are checks drawn on banks of the same town and members of the clearing house, they are sent to the clearing house desk; if drawn on other banks of the same town the items go to the collection department; if drawn on out-of-town banks the mail desk or mail teller takes care of them. The paying teller must constantly be on the alert that payment is not made for the wrong amount or to the wrong person. His work is complicated by the fact that he has to watch for checks upon which he has received a *stop payment* order from the drawer. As soon as an order not to pay a check previously issued is received, a card is filled out giving all information and also the reason for the stop payment, such as "check stolen," "check lost," etc. This card is constantly before the eyes of the paying teller near the cage window.

The Note Teller. The note teller is in charge of the notes. He aids in the preparation of notes and supervises the collection of interest and principal. In case collateral is deposited he inspects the collateral, and keeps himself informed of any changes which may occur in its market value. Notes are always discounted for less than the market value of the collateral. The difference between the actual value of a collateral and the amount of the loan is called the

margin. The note teller must not allow this margin to be wiped out by a sharp decline in the market. Should the margin be in danger then he must call for additional collateral.

The note teller keeps a *note register* which is a list of all the notes held by the bank. He also keeps a *direct liability* and an *indirect liability register*. In a direct liability register the loans made and the notes discounted are recorded under the name of the customer directly liable. This enables the bank to tell at a glance whether it is safe to allow the customer to borrow an additional amount. The indirect liability register shows how many notes each customer has indorsed. Such indirect or contingent liability may at any time become a real liability should the person directly liable fail to live up to his financial obligations. A large indirect liability may, therefore, prevent a person from borrowing any more himself.

The Clearing House. In the course of a day's business a bank receives from its customers a number of checks drawn on other banks. The items on out-of-town banks are sent out by the mail desk or out-of-town department to one of the bank's correspondents for collection. Such a correspondent is a bank in another town with which the bank carries on a reciprocal business.

The checks drawn upon other banks in the same town or city must be collected by the bank itself. The likelihood exists that the other banks in town

will in turn have received from their customers and from out-of-town correspondents, checks drawn upon most of the other banks in that city. In order to save each bank the trouble of sending out runners to collect the checks and to carry the money back with them to their banks, a *clearing house* is established. This is a large room where representatives of the banks gather, each at his own desk, and where they exchange their checks. Only the differences or balances are then settled in money. This saves much time and means also a great economy in the use of money. To give an example: Suppose bank A has checks drawn on bank B for \$5,000, while bank B has checks drawn on bank A for \$4,500. If each bank sent out a runner to collect these items these men would pass each other on the street, one carrying \$5,000, the other \$4,500 of cash, a total of \$9,500. If these men meet at the clearing house, bank B pays bank A for the \$5,000 worth of checks with its \$4,500 worth of checks and still owes \$500. This is a simple case.

In most clearing houses there are a large number of banks, some twenty or thirty. Each of these banks sends clerks to collect checks on other banks and to pay checks presented, but no actual payments take place. The whole question of payments is reduced to a bookkeeping transaction, a question of debit and credit. Every bank brings claims in the form of checks and receives evidence of money

which it owes to the other, *i. e.*, to all banks represented in the clearing house. The difference between these two claims forms a balance to be paid, or a balance to be received. This is a balance not with any one bank but with all the banks, in other words, with the clearing house. The balance is, therefore, paid to, or received from, the clearing house. Millions of dollars in checks brought by banks into the clearing house may be thus settled by a payment of balances amounting to very small sums.

Safety Deposit Department. Many banks maintain a safety deposit vault and rent boxes to those who want a safe place to keep valuable papers. Usually these boxes are kept in a large vault which is closed at night, and each box is locked with two independent and different locks. The key to one lock is given to the renter, the key to the other lock is held by an official of the bank who must identify the customer before admitting him to the vault.

Other Departments of a Commercial Bank. The departments and officials discussed are the ones with whom a business man most frequently comes in touch. Importers and exporters deal with the *foreign exchange department*, which handles all drafts and other financial documents drawn by or upon foreign banks or firms. In the larger banks a *foreign trade department* is maintained which advises customers who are buying or selling in foreign markets, keeps

them informed of market conditions, and often brings them in touch with reliable firms who can act as their foreign representatives. The larger banks in New York, such as the National City Bank, the Irving National Bank, and the Guaranty Trust Company, publish pamphlets and weekly or daily lists containing financial or trade information, and distribute them free among their customers.

In all banks are found, moreover, a *collection department* which collects all local items, and an *accounting department* of which the individual bookkeepers are a part.

Loan and Trust Companies. Among non-commercial banking institutions the trust companies are of most vital interest to business men. As a rule such companies do not handle short-term transactions though some of them combine a commercial banking business with their loan and trust business, and many of them maintain a separate banking department. The trust companies, because they do not deal in demand obligations, can safely invest in real estate and loans on inactive securities for long periods. They perform, as the name indicates, principally *trust functions*. They act as mortgagees in trust for bondholders; they administer estates; collateral, mortgage, and equipment trusts; and act as fiscal agents for corporations. A fiscal agent is a duly appointed agent who receives and pays out funds. In this capacity they pay the bond principal

at maturity or pay the interest when due. The work of transfer agents and registrars is usually intrusted to a trust company. They also administer underwriting syndicates, and in case of reorganization or dissolution they act as receivers, looking after the interests of the bondholders.

Many of these functions could be performed and are not infrequently performed by individuals, but there are advantages attached to intrusting these duties to a trust company. The principal advantages are that trust companies are permanent, they are experienced, they have regular business hours, their transactions are confidential, and they are in close touch with the financial world, and, therefore, better informed than most individuals. In former days trust companies carried on an insurance business along with their other activities, but this is no longer customary. Trust companies all operate under state laws and legal requirements differ widely in the various states.

Savings Banks. In the ordinary course of business a business man will have little occasion to deal with savings banks. These are a class of non-commercial banks which are primarily organized to afford a safe and moderately profitable means of investing small savings. These banks appeal to the working classes and to persons of moderate incomes who accumulate slowly by small weekly or monthly installments. Safety, and a fairly good return, are the ideals for

which the management of such banks strive. In order to attain these ideals they invest only in safe and tried securities, based upon real estate or issued by municipal, state, or federal governments, or by industrial concerns of proven stability. Consequently, such banks cannot be expected to pay their depositors upon demand. Investments such as they make are safe, but cannot be quickly turned into cash in large quantities. Savings banks, therefore, do not favor demand withdrawals. They either require notice a certain number of days before withdrawal will be permitted, or they limit the amount which may be withdrawn at one time.

The fact that interest is only paid on deposits which remain with the bank for a certain minimum period, usually three months, acts as an inducement to allow the deposits to remain undisturbed. The surplus money which must be kept available for withdrawals from day to day is usually deposited with commercial banks who pay the savings banks a small amount of interest on such deposits.

Savings bank accounts, since they are not subject to demand, are not active. This means that the employees of the bank must use double care not to make payments to anyone not entitled to receive it. Tellers quickly learn to recognize the signatures of active depositors, but no one can remember a customer or his signature if the depositor presents himself at the bank only a few times a year. Such banks,

therefore, refuse payment except upon presentation of the pass book.

Savings banks in the eastern states are frequently charitable institutions operated with no thought of profit. All earnings are then divided among the depositors or members. In the middle western and western states, savings banks are organized as corporations like commercial banks. They promise a regular rate of interest and the net earnings are paid out as dividends to the stockholders. As buyers of fiscal bonds and mortgages, savings banks form an important channel through which the small savings of the masses find productive employment.

Insurance Companies. Insurance companies serve the business world in two ways. First, they aid in solving the problem of risks which every business faces, and second, they absorb large quantities of securities, and thus supply to commerce and industry the working and capital funds needed. This needs further explanation. Life is full of uncertainty. No one knows when death will call him, or when some disease or accident will render him temporarily and permanently unable to work. Fire may destroy without warning the savings of a lifetime, and even in a bank's fireproof vaults, thieves may break in and make away with the valuable contents. It is interesting that these uncertainties may be reduced to certainty. The number of houses that burn each year in any one city or in the entire United States

varies but little. Every year about the same number of people pass away, except, of course, in time of war or epidemic. The number of automobile accidents is a fairly constant figure and so is the number of thefts. This means that it is possible to predict, not which particular house will burn next year, but with a fair degree of certainty how many houses are likely to be destroyed in New York during that same period, and with even greater certainty how many will be burned in the United States as a whole.

The larger the territory covered the less local conditions will influence our figures. One incendiary may cause the fire loss in a country town to rise far above normal, but his work will have little effect upon the figures of the country as a whole. The same reasoning holds true of the death, sickness, accident, and theft statistics.

Reducing Uncertainty to Certainty. - If in a town of a hundred thousand houses, one hundred houses burn every year, the house owners may agree to establish a fund by regular contributions from which all fire losses would be paid. This fund would not need to be larger than to rebuild one hundred houses a year. Every house-owner would, therefore, be called upon to pay one one-thousandth of the value of a house each year. But in return he would have the promise that should his house burn it would be rebuilt from the general fund. This is the principle upon which all insurance is based.

By forming a sufficiently large club of people all facing the same risks, and by studying carefully the experience in the past of such risks—the longer the period the better—it is possible in almost every case to arrive at a figure which will indicate what may reasonably be expected in the future. Some fluctuation will occur, but if studied over a long enough period, even this fluctuation will be discovered to take place with regularity.

If each business man had to face his own risks, commerce would be much hampered, if not impossible. Who, indeed, would dare stock his warehouse full of expensive goods, investing not only all that he possessed but funds borrowed from others as well, when a carelessly dropped match of some minor employee might start a fire. Such a fire would bring ruin to the owner and would destroy the means of paying those from whom he borrowed. Insurance makes it possible for him to protect himself against this uncertainty. A comparatively small yearly payment in the common fund buys him certainty. He may now expand his business, tie up all his funds, and borrow from others. The risk of fire is no great cause of worry to him.

Insurance as a Business. Sometimes such funds are administered co-operatively. Such insurance organizations are called *mutuals*. Most of the insurance is in the hands of companies which make a business of writing insurance and the stockholders of which

reap the benefit of the difference between losses paid and earnings. These earnings are derived from *premiums* or the periodic payments of the people insured, and also from the income of the investments made. Every insurance company must set aside a reserve, and is frequently compelled by law to do so. From this reserve, unexpected fluctuations in losses are met. The funds of this reserve are invested in bonds and stocks and yield a substantial income.

Different Types of Insurance. Many risks have in this way been reduced to regular payments. It is possible to insure against sickness, accidents, unemployment, and death. Caruso was insured against loss of his voice, while Paderewski insures his fingers. The business man finds it possible to insure against fire, against loss of goods at sea, against losses resulting from dishonesty of employees, or from faulty titles to real estate. He may protect himself in the same way against storms, hail, and frost. He may insure his goods, his building, his furniture, or his plate glass windows.

Fire Insurance. Besides considering the actual normal risk from fire, a fire insurance company must also consider the moral risk. It is not difficult to see that after a piece of property has been insured, the owner is likely to be a little more careless with it. He says to himself, "It is insured, anyhow, so I don't care." He may even go so far as to destroy it inten-

tionally in order to collect the insurance. This is a problem to be reckoned with in all insurance, but most of all in property insurance; for it is not likely that Paderewski would deliberately put his hand against a band saw or that a man would commit suicide to collect the insurance. In fire insurance, the moral risk is a real risk. The *policy*, which is the contract between the insurance company and the insured, always is careful in stating that the amount which will be paid by the company will not exceed the cash value of the property destroyed. The actual loss must be determined after the fire occurred. This clause is intended to limit the moral risk, for if payment were made for the face value of the policy regardless of the value of the property at the time of the fire, having fires might become a profitable line of business. Many states, however, have passed *valued policy* laws under which the insurance company is compelled to pay the face value of the policy in case of total loss, even though the actual loss is far less than that.

In order to bring uniformity in the insurance business many companies have by mutual agreement adopted a standard policy. This policy is a formidable document. The principal features are the following: In the first place, the policy insures only against "direct loss or damage by fire," but this must be interpreted to mean fire which has escaped from its proper receptacle. No damages can be collected

on a coat scorched by being hung near a red-hot stove. Loss resulting from lightning is, therefore, not covered unless special mention is made of it; neither does the contract offer protection against theft in the process of removing goods from a burning building. If goods insured are spoken of in a contract as in one building, they are no longer protected if removed from this building.

When a fire has occurred the insured must give immediate notice in writing and he must send in a statement of the amount of his loss, accompanied by a statement of a notary public that he regards the claim to be honest. Usually there is a clause in the policy which provides for the appointing of appraisers who are to pass upon the justice of the claim.

The rate which must be paid for fire protection is determined to a large degree by the kind of *risk* offered for insurance. A wooden building standing near a wooden garage is more in danger of being totally destroyed than a concrete fireproof structure in the middle of a field. The wooden building would, therefore, have to pay a higher price for the insurance protection. The following factors influence the cost of insurance:

1. The type of building; whether wood, stone, or concrete.
2. The use to which it is put. An ice storage plant runs less danger of fire than a garage.

3. The fire prevention measures taken. A store with a sprinkler system, that is, a system of water pipes which automatically spray water into the store when heated to a certain temperature, pays a low rate.
4. The surrounding buildings. A good building may have to pay a high premium or annual payment because surrounded by poor risks.
5. The condition of the street and of the fire fighting equipment of the town. A wide, well-paved street makes it possible for the apparatus to reach the building quickly. A greater loss is likely to result where fire has to be fought with a low pressure municipal water supply than where a special high pressure system has been installed for fire fighting.

Marine Insurance. When goods are shipped by water it becomes necessary to insure them against losses resulting from the "perils of the sea" as well as from fire. These risks are covered by marine insurance. Much of the marine insurance business in this country is handled by foreign companies, among which English companies are the most important.

The English marine insurance is centered in Lloyd's. This is a corporation of which marine insurance companies are members and which has as its purpose to protect the interests of its members, to collect and to distribute information in regard to shipping, and to conduct an insurance business. The agents of Lloyd's are found in every important ship-

ping center. They are charged with collecting information regarding ships, inspecting vessels, reporting upon losses, and with aiding in collecting evidence.

An important publication published by an affiliated organization, is Lloyd's *Register of British and Foreign Shipping*, which is a catalogue of all English ships of over one hundred tons and of a large number of foreign ships. A detailed description of the ship is given, and the vessel is rated on the basis of a regular inspection. This rating determines the rates charged for insurance.

Lloyd's Corporation of Underwriters makes it possible for many companies to underwrite large risks together. This is called *underwriting*, because each company signs or *underwrites* the policy. The total risk is thereby divided over a large number of companies, sometimes as many as fifty. This means a wide distribution of risk for each company, and it lessens the effect which the sinking of a large, expensive ship would have on the finances of an individual insurance company.

A large number of different policies are issued, some covering the ship, and others the cargo; some protecting against damage from the "perils of the sea," and others against theft or lighterage accidents.

Usually policies issued for goods carry the "F. P. A." clause (free from particular average). Average means damage. This clause indicates that the insurance company does not undertake to protect the

shipper against partial losses or damage. The policy covers, in such cases, only a total loss resulting from the destruction of the ship, and also *general average*. Any charges made against ship and cargo to cover damages incurred by a particular shipment in order to save the ship, such as throwing it overboard to lighten the vessel, are called *general average* and are, therefore, covered by the policy. It is possible to insure goods "W. P. A." (with particular average), if the shipper desires it.

Credit Insurance. Every business man who sells goods on credit faces the risk of not being able to collect. Under normal conditions and when due care is used in extending credit, these losses run fairly even. This normal loss is different in every kind of business; in some it is one per cent of sales; in others as high as four per cent. As long as these credit losses remain normal the business man is not troubled. He will merely charge that much more for his goods, counting his credit loss as part of his cost of doing business. What does cause him worry is the possibility of an unexpected and unusual loss. Against this unexpected loss he can insure himself with a credit insurance company. The normal or initial loss he must bear himself.

A credit insurance company will not insure against all abnormal losses, but limits its payments to a certain percentage of the *capital rating* which the firm has received in Dun's or Bradstreet's credit reports.

If a customer is rated at \$50,000, then the credit insurance will cover a loss not exceeding, say 25 per cent of this, or \$12,500. In addition to this, the insurance company will limit the amount which will be paid on any one account. This is known as the *single account limit*. Suppose that the single account limit in the case given was \$10,000, then the payment upon this account, notwithstanding the high capital rating, could never exceed \$10,000. The merchant would have to face the remaining loss.

In most cases only accounts with firms which are classified in the first two classes of credit by Dun and Bradstreet can be insured. In Dun's classification only *high* and *good* credit risks are insurable.

In addition to all these limitations the insurance company will limit its total liability to a fixed sum. No matter what the losses are, the company can never be called upon to pay more than that sum upon the policy issued. Credit insurance is still comparatively new, but manufacturers and wholesalers are increasingly making use of the protection it offers.

Fidelity Insurance. When an employer hires a new employee, places him in a responsible position, allows him to handle large sums of money or to collect bills from customers, he is taking a risk. The employer will, therefore, require that the employee offer some security by which he may be reimbursed in case of a loss. The employee may ask some of his friends to

“go bond” for him, that is, to promise his employer that they will make good any loss resulting from dishonesty. But not everyone has rich friends who are willing to do this, nor is everyone willing to bother his friends with such requests.

The fidelity insurance company takes the place of these friends and in return for a fee, paid by the employee or the employer, undertakes to protect the employer, after a careful investigation has been made of the trustworthiness of the new employee. The employer is protected more securely than when friends undertake to protect him, for the company is more likely to live up to its obligations. The premium is determined by the statistics of risk, and also by the actual amount of money which it will be possible for the employee to misappropriate. In order to limit this amount the insurance company will frequently require certain internal checks. This usually means that the making of payments and the authorization for payment are placed in the hands of different employees. Frequently such companies require checks to be signed by two officials, while payments in cash must be reported at the end of each day to some other official or employee. Companies undertaking this kind of insurance are called fidelity, guaranty, and bonding companies.

The Stock Exchange. The stock exchange provides a market or meeting place for buyers and sellers of stocks or bonds. Such exchanges are found in many

large cities. In New York three such markets exist, the New York Stock Exchange, the Consolidated Stock Exchange, and the Curb. Each of these stock markets is an association of men who make a profession of buying and selling securities. Trading on these exchanges is limited to its members. There is a good reason for this. The exchange is established not only in order to provide a place where trading may be done, but also to regulate this trading. The rules of the exchange are very strict and any one violating them faces the danger of losing his *seat*.

The New York Stock Exchange is stricter in its regulations than the other two mentioned, both in the supervision of trading and in its requirements imposed upon the companies which are anxious to have their securities admitted to the exchange. Its rules for membership are exceedingly strict and the number of members is limited.

The stocks and bonds which satisfy the requirements of the New York Stock Exchange are listed and are spoken of as *listed stocks* or *listed bonds*. In order to have its securities listed, a company must submit detailed information regarding assets, liabilities, the number of shares authorized, a list of the officers and directors, and the addresses and names of the transfer agent and the registrar. Moreover, the Exchange requires that annual reports containing balance sheet, profit and loss statement, and operating statistics be sent to the stockholders. The New

York Stock Exchange also allows dealings in securities which are unlisted, but these, too, must satisfy certain requirements before being admitted to this privilege. Banks will lend more readily upon listed than upon the unlisted securities when presented as collateral.

Stocks and bonds not admitted to the New York Stock Exchange are bought and sold on the Consolidated Stock Exchange and on the Curb. The latter is an exchange held in the open air a short distance from the New York Stock Exchange building.

The Brokers. A *broker* is a person who buys or sells goods for others. The pay received for this service is called *commission*. A broker dealing in stocks and bonds is called a *stock broker* or *bond broker*. Not all brokers are members of an exchange; they may deal through others who are members. In the New York Stock Exchange the membership is limited to 1,100, and seats are sold at high prices by members who wish to retire. The prices paid vary, but as much as \$80,000 has been paid. The buyer must have the approval of the membership committee. The members all charge the same rate of commission, which in the case of transactions for outsiders is no less than one-eighth of one per cent on the par value of securities.

How Stocks and Bonds Are Sold. The brokers and the stock exchanges perform very important services to the business world. Without this financial ma-

chinery, corporations would have great difficulty in finding a market for their securities. Through the exchanges investors are enabled to buy large varieties of securities, and they are constantly on the alert for those which promise not only a fair return, but also a possible rise in price.

Right here a word may be said about investment and speculation. If one buys securities with the intention of keeping them, and largely because they promise a good return on the purchase price, then this may be called *making an investment*. It is different when one buys securities with the intention of selling them soon and to make profit on the change in price. This is *speculation*. The line is difficult to draw—it is largely a matter of intention.

Securities bought for investment are almost always paid for in cash. The reason they are wanted is because someone has a cash surplus. Stocks bought for speculation are almost always purchased with funds obtained by borrowing from the banks. Suppose a speculator desires to purchase \$10,000 worth of stocks. He may go to a bank and borrow enough to make this possible. Usually a broker will do this for him.

The bank is willing to lend the necessary funds on condition that the securities be placed in its vault as collateral. Naturally a bank will not lend up to the market value of the stocks or bonds but will require a *margin*. This may be 10 per cent of the market

price or more, as the case may be, depending upon the class of security offered, and upon the market price. The speculator will have to supply the remainder. By this method a man with \$1,000 may speculate upon the possible rise in value of \$10,000 worth of stock. The bank cannot lose as long as the market price of the stock does not fall below the amount of the loan.

The buyer must pay the bank interest on the loan and must pay a commission to the broker. Should the market price fall, the bank will call upon him to increase his collateral or to supply more margin. If he is unable to furnish either, then the bank will sell out and he must face his loss. The fear of losing the investment often drives such speculators to misappropriate funds to satisfy the demands for more margin. They always hope that a sudden change in the market will enable them to sell with a profit and to cover up their dishonesty.

The market for stocks and bonds is extremely sensitive to all financial, economic, and political changes. Every national and international event has its effect. Those dealing in securities must, therefore, keep a close watch upon prices, and study world conditions constantly.

The optimism in some quarters is reflected in the *bulls*, that is, those who buy with the expectation that prices will go up; while pessimism in the future of prices leads to *bear* dealings. The bear sells stock

for future delivery, say a week later, and hopes that the price will have declined sufficiently to allow him to buy at a lower price than the one for which he has contracted to deliver. This is *short selling*, while a bull is *long of the market*. These two opposing camps are constantly contending and keep the market active.

The stock exchange performs, therefore, several important functions in the business world. It provides a regular and regulated market for securities, as well as strict supervision over its members. Regular dealings make it possible for investors to invest their money with the knowledge that they can turn their investment into cash at any time in the future. The exchange also makes it possible for the banks to find a profitable market for some of their funds which otherwise would lie idle, by lending on collateral. Without stock exchanges corporations could not easily find a market for their securities, and industry would depend for its expansion largely upon local funds.

Summary. Many institutions offer aid to the business man in the solving of his financial problems. The banks, loan and trust companies, insurance companies, and the stock exchanges are the most important financial institutions. The commercial banks aid in supplying the current needs of business, the non-commercial institutions are largely active in offering opportunities for the expansion of permanent

capital funds. Insurance is a great aid in the financing of business. By means of it uncertainty is reduced to certainty. The stock exchanges provide a ready market for the sale of securities. The brokers are the officially recognized traders on these exchanges.

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QUESTIONS FOR FURTHER STUDY

Banks

1. What departments are found in the bank with which you are best acquainted?

Reference: Interview with some official of the bank.

2. What system is used in that bank to keep its depositors informed of the condition of their accounts?

Reference: Interview with some official of the bank.

3. Is "paying and receiving" done by one teller, or by two, or by several? Or are the two combined in several windows? Can you discover the reason for the arrangement that exists?

Reference: (a) Harris. Chapters V, VI.

(b) Interview with paying or receiving teller of the bank.

4. What type of savings bank exists in your city?

Reference: (a) Interview with official of the bank.

(b) The banking law of the state.

5. What does the law in your state say in regard to the carrying on of a banking business by a trust company? Do you see a good reason for the regulation?

- Reference:* (a) The banking law of the state.
(b) Kirkbride and Sterrett. Chapters I, II, IV.

Insurance

1. How are insurance rates determined?

Reference: Huebner. Chapters XVI, XVII.

2. What may a business man do to lower his insurance rates?

Reference: Huebner. Chapter XX.

3. What causes have contributed to give England prominence in marine insurance?

Reference: Huebner. Chapter XXII.

Stock Exchanges

1. What is meant by *call loans*?

Reference: Conway and Atwood. Chapter IV.

2. What are the requirements for admission of stocks to the *list*?

Reference: Ibid, Chapter IV.

3. What is the New York Stock Exchange clearing house?

Reference: Pratt. Chapter IX.

4. What is a subscription right, and how is its value determined?

Reference: Lough. Part III, Chapter XIII.

5. Describe how a brokerage house handles an issue of stock.

Reference: Lough. Part III, Chapter XIV.

TEST QUESTIONS

1. Describe how a deposit is made.
2. What are the duties of the individual bookkeeper?
3. How does the clearing house operate?
4. What factors determine the rate to be paid for fire insurance?
5. What is meant by "average"?
6. What kind of protection is offered by a credit insurance company?
7. What is a stock broker?
8. What is meant by *short selling*?
9. Distinguish between speculation and investment.

CHAPTER VII

MANAGEMENT

The Problems of Management. The management of a concern may be in the hands of the owner, or in the case of a partnership, in the hands of one of the partners. In corporate enterprises and frequently in unincorporated undertakings a manager is appointed to supervise and direct the enterprise. Such a manager usually has full control over the buying, manufacturing, and selling, though he is responsible for his work to the owners. In some corporations an executive committee is appointed to confer frequently with the manager and no important decision can be taken without its consent.

The manager brings together the raw material, the tools and machinery, the working force, and directs the processes of production. His aim should be to combine these elements in the most effective way so that he may obtain the greatest net result. The manager's position is a very difficult one and one which demands wide knowledge and deep insight. He must know a good deal of the methods of production, of tools and their correct use; he must be something of an engineer. He must not only know the physical plant, he must also understand the financial prob-

lems that affect a concern. Not only large output but output at competitive cost should be his aim. He must, therefore, understand the buying and selling market; he must be something of a business man. In order to be able to interpret the records of the concern, he should have some knowledge of accounting.

Finally, he should know not only how to get results in respect to volume and cost of output, he should be able to get these favorable results without sacrificing the human element in the business. Success in output should go hand in hand with making better, stronger, happier men and women out of the working force. A business concern which attains material success at the expense of those who work within its walls is a social menace. The manager, therefore, faces no small problem.

The Manager as a Jack of All Trades. As long as the business unit is small and the workmen few in number, and as long as these workmen are largely skilled experts in their own line the manager will be able to oversee all details of the business himself. He relies to a large extent upon the knowledge and skill of his workmen for the efficient execution of the work. He also relies upon his personal contact with them to settle any difficulty or friction. He usually has climbed up from the ranks and is sufficiently acquainted with the processes to be able to supervise them and even to instruct the workmen. To be sure he does not show equal efficiency in all the various

functions he is called upon to perform, but he is in no worse shape than his competitors who are facing the same important and unrelated duties.

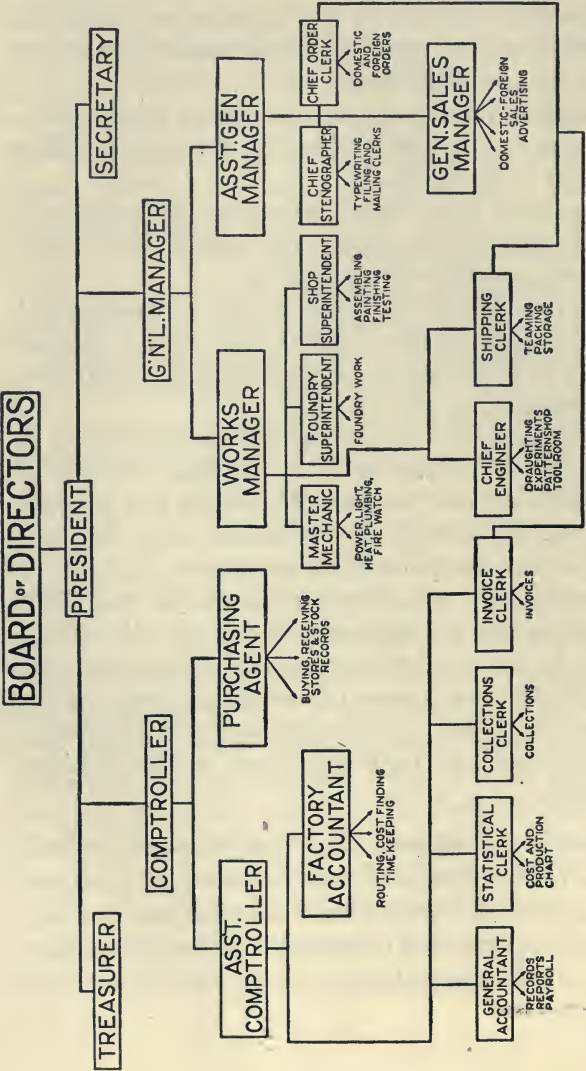
This type of one-man organization is still found quite generally; it is the typical organization of a small concern. The owner or manager attends to everything and is usually very jealous of his powers of control. Feeling that no one can perform these various functions as well as he, he is afraid of delegating authority to others.

When the business grows large it becomes humanly impossible for one man to look after every detail. It is, therefore, necessary to appoint assistants. When it is decided to take this step some definite plan of dividing the duties and the authority of those appointed must be outlined. The division of work which first suggests itself is that into production, sales, and administration or office departments. In addition to a general manager, three submanagers who are directly responsible to the general manager will be appointed. The various clerks and workingmen in these departments remain the same, the only difference is that they are from now on responsible to the production manager (or factory superintendent), the sales manager, or the office manager, as the case may be, and not directly to the general manager.

There are certain fundamental principles which must be observed in this and every type of business organization, for these principles are basic:

1. The men and women in the organization should be selected with due regard to their fitness for the work that is expected of them.
2. The work and duties of every member of the organization should be sharply defined so that responsibility can be readily located.
3. Orders should be standardized, so that no feeling may be created that the order is unreasonable and unfair as between different employees.
4. Orders from executives down the line to workers and reports from workers back to executives should all be in written form as far as possible to avoid misunderstandings and disputes.
5. Every member of the organization should be made to feel that he is getting a "square deal," should be made to realize that only teamwork can produce results. His interest in the success of the firm and in his own work should be awakened.
6. Once authority has been delegated the executive should never interfere with the work. He should hold his subordinates responsible for results, but should encourage them to exercise fearlessly initiative and control. Nothing has such a disintegrating effect upon the organization as executive interference.

The Line Organization. As the number of workers increases in the production department, the supervision may be still further divided, and foremen appointed who are directly responsible to the production manager or superintendent.



ORGANIZATION CHART OF A FACTORY
ILLUSTRATING LINE CONTROL

In the sales department a similar subdivision may take place, and heads of departments may divide among them the supervision of advertising and of the salesmen in the field.

The office department may also be subdivided. A head stenographer then controls all stenographic work, a head bookkeeper supervises all the accounting work, and a head correspondent looks after all correspondence. In every case, these minor executives are directly responsible to the managers of their departments.

The type of organization just described is called the *line organization*, for authority flows in a straight line from manager to foreman, and from foreman to workmen.

Directing our attention towards the production department, let us stop for a moment to consider what are the duties of a foreman under this type of organization. In a plant engaged in a simple continuous or analytical industry his job is simple enough. In a flour mill, for instance, all he needs to do is to control the speed of the various production centers and to supervise the repairs and adjustments. But even here he is expected to do some things for which neither his training nor knowledge fit him. One of these is the hiring and discharging of workmen. In respect to that function he is, indeed, a little potentate who can do no wrong, for frequently there is no appeal from his decision.

The Duties of the Foreman. In a factory of the assembling type things are worse. Here the foreman is called upon to read blue prints, to interpret them, to explain them to the workmen, to aid them in setting up the necessary tools and machinery, to regulate the speed of the machine and of the feed, to look after repairs and upkeep of the tools, and to see that workmen are supplied with the proper raw materials at the right time and in the right place—these are but a few of the many matters that demand his attention. If he is, unfortunate enough to work in a factory where no very definite departments exist so that the spheres of authority of the foremen are not sharply defined, he must not only perform the many duties enumerated, but he may spend part of his time in argument with his fellow foremen to determine where the authority of one begins and that of the other leaves off. Wherever lines of authority are not sharply drawn the tendency will be for men to shift responsibility upon others.

This is not an exaggerated picture. Many plants are operated on a plan very similar to the one described. It is small wonder, therefore, that no very great efficiency results. The demands placed upon the foreman are often superhuman demands. An all-round man may attend to all these functions fairly well, but he cannot be expected to achieve maximum efficiency in all of them. The principal, and some claim the sole advantage, of this type of management

lies in its simplicity and in the ease with which responsibility can be located.

The worst feature of this type of organization lies in the relationship of the members to each other. In order to secure maximum efficiency, it is necessary to secure whole-hearted and enthusiastic teamwork. But everything seems to indicate that real teamwork cannot be expected to develop naturally in this kind of organization.

What Keeps the Men at Work? The superintendent must show results. He can only show results if the foremen show results in their various departments, and they in turn depend upon their workmen. The system, therefore, frequently deteriorates into a system of driving. The manager drives the superintendent, the superintendent the foreman, and the foreman speeds up the workmen. This is often called *drive-management*. "Keep busy" and "Step lively" are the mottoes of this type of management. It is all the more vicious since no one in the organization has a very definite notion of what constitutes a fair day's work.

Every workman has his own notion about the tools which he should use, and uses them according to his own method. There is little uniformity in the methods of work of the men, and, therefore, little uniformity in time and in quantity of output. If asked how long a job should take, almost every man would give a different answer. Everything is based

on guesswork and those who do the work have nothing to gain by aiding their overseers to arrive at a fairly accurate estimate. Soldiering, loafing on the job, making work, are all bred under this kind of management. The manager and the foremen want maximum output; the workmen have nothing to gain by increasing the output. By unusual exertion they would merely set a higher standard for themselves and others, which they will be forced to equal from then on with no reward if they attain it.

The principal driving force in such a system of management is fear. The fear of discharge is held over the heads of the workmen as a club. The few workmen who would excel are held back by the criticism and illwill of their fellow workmen who resent a *speeder*, and frequently, also, by the illwill of the foreman who is always more or less in fear of having to give up his job to some workman of exceptional ability. The foreman is afraid of being shown up. It is little wonder, therefore, that the ambition of many workmen soon becomes to do as little as they can without being discharged.

The Problem of Securing Co-operation. The modern, wide-awake manager is not satisfied with the old type of management and seeks in some way to introduce other elements into the organization in order that co-operation and teamwork may take the place of driving.

We discover as we study this primitive method of management that its faults are principally:

1. The foreman is expected to do too many unrelated things.
2. There is a general lack of information as to what constitutes a normal amount of work.
3. There is no other incentive given the workmen, except fear of discharge.

The interesting thing is that the first two faults are both the result of a misconception of the true function of management. This needs to be explained in more detail.

Every productive act may be analyzed into three parts: first, the idea; second, the planning of the processes by which the idea may be materialized; and third, the actual doing or the execution. Suppose that we are asked to write an essay, we would not start in writing until we knew what we were going to tell and until we had a fairly definite notion as to how we were going to tell it. If these two preliminary stages are completed, the writing itself is relatively simple. Of course, the actual writing demands great skill, but it is skill of a different type. It is skill in doing, while the thought and outline demand skill in planning. And so it is whenever anything is to be produced. The planning precedes the execution and demands a different type of knowledge and skill.

What causes the confusion in the old organization is that both foremen and workmen are called upon

to do a great many things which should have been done for them. And because they have been customarily expected to do so many things which really lie outside their sphere, no one has paid very much attention to their efficiency in doing the work which was specifically theirs.

No one would expect a workman at the bench to design a motor or some other complicated piece of machinery. He has not been trained to do this. It is equally unreasonable to expect a workman or a foreman to interpret the drawing and to know the best way of planning the execution of the article.

In other words, as managers begin to look for a way of simplifying the work of the foreman so that it may be possible to find some one capable of filling the position, they discover that the first step should be to relieve him of all the planning work. Such work should be done by the management and should not be left to the shop.

Some factories are subdivided into a large number of sharply separated departments, which all receive orders from and render reports to some central office or executive. Every department can then be made small enough to allow one man to supervise it properly and to attend to all the functions of the foreman. This simplifies the work of the foremen, but it does not solve the problem of taking out of their hands the various management functions, neither does it

solve the problem of a more cordial relation between workman and manager.

In this and the following two chapters we shall study various methods used in plants, offices, and stores to create a family spirit in the business concern. We shall see that the methods fall into four groups:

1. A different kind of management changing the flow of authority and defining more and more sharply the work demanded of each man.
2. Various ways of rewarding the workman.
3. Concentrating the control of the working force in a separate department; taking control of hiring and discharging the employees out of the hands of the person in charge of operation.
4. Various "welfare" schemes intended to elevate the workman morally and mentally, and to teach him the value of co-operation.

It is never good policy to drive a person against his will. The only successful kind of management is one based not on driving but on leadership. Leadership is the capacity to make men pull together toward a common goal. That is the central problem of the manager. The first step in the right direction is to make the work demanded of men reasonable and adapted to their capacity. The establishing of a planning department between the drafting room and the shop is a result of this demand.

The Planning. Instead of handing to the foreman a copy of a blue print and telling him to go ahead, the manager will insist that this print be first carefully analyzed by the planning department. A *production order* is here made out which is a list of the component parts of the articles to be produced. This makes it possible to tell first of all what parts are ready in stock; second, what parts must be bought outside; and third, what parts should be made in the shop.

The planning department should now plan the work carefully. Suppose that the finished article is to be completed on the first of November or thereabouts. Suppose further that the actual assembling will take about a week. Then the planning department will know that all component parts must be ready for assembling not less than a week before the first of November or about October twenty-fifth. Some parts may have to be ordered. The purchasing department is notified to see to it that such parts are ordered and are on hand in time. Special tools may also be ordered ahead in this way so that they will be on hand when needed.

Now the work of each part to be produced may be planned. A part which requires three weeks to be completed should be started in ample time so that it may be ready for assembling, and must be started just two weeks before a part requiring only one week for completion is begun.

The planning department should have a record of each machine, of the work which is in process on the machine, and of the work which is waiting to be done. A bulletin board is frequently used for this purpose with two clips or pockets for each machine, one for *in process*, the other for *assigned work* cards. It is then possible to tell with little trouble which machine will be ready to undertake the new piece of work on time. The storeroom is now notified to set aside the required raw materials.

The next thing is to draw up careful instructions to the workman, telling him:

1. What he is expected to make.
2. What is the best way of making it.
3. How long the job should take.

It is easily seen that the giving of these instructions is a part of the work of the management, while the foreman should see that the instructions are followed. This is a logical division of authority and is a reasonable task to set the foreman.

Lack of Accurate Knowledge Becomes Evident. So far everything has gone smoothly, but when one is called upon to give instructions, it is, first of all, necessary that the one giving the instructions possess definite and accurate information.

Go into any shop and ask the opinion of a number of workmen regarding the best way of doing a certain piece of work, the speed of the machine, the

correct kind of tool to use, how fast the rough piece to be worked must be fed under the tool, and a variety of other questions, and every man in the shop will have a different answer. Call in the manager or the foreman and the confusion will only be increased. And still these are all physical facts which cannot be settled by opinion, or guess work, or majority vote, any more than an answer can be found by any of these methods to the question, "How many miles can this machine run on one gallon of gasoline?"

All such physical facts may be determined by scientific methods. If it is a question of what kind of tools should be used for a certain machine process, experiments may give the answer, not approximately right, but with absolute accuracy. It is the same with all the other intricate mechanical problems of the shop. It cannot be denied that it is important that the best way of doing a piece of work should be discovered before the work is undertaken. It is plain that in no other way can maximum efficiency be obtained.

It is of equal importance that the workman should be properly trained to do the work in that way and that he should be supplied with the proper facilities. Finally, it also seems logical that in some way the workingman must be interested in the results to be obtained. These almost self-evident principles, however, are to a large degree violated in most business

concerns. They operate successfully but can never hope to reach their maximum efficiency until all guesswork has been eliminated and displaced by accurate information.

Scientific Management. The system of management which aims to apply these principles and which endeavors to eliminate all guesswork and to place all information and instructions regarding the work in the shop on a truly scientific basis is called *scientific management*, or sometimes, after its originator, the *Taylor system of management*.

This system will now be described, but before anything further is said, it must be understood that the preliminary work of installing such a system is extremely costly and few concerns can afford to go to the expense of adopting it. This does not, however, destroy the value of a study of the system, for every concern can introduce some features of the system, and thereby greatly increase its efficiency. Our main interest in this method of management is in the principle which it illustrates, namely, how business may profit by a scientific approach to its problems.

The Management Should Look After All Management Functions. This is the first principle which scientific management considers as fundamental. The establishment of a planning department is in recognition of this principle and scientific management carries this principle to its logical conclusion. The practical result is that the planning department is now sub-

divided into four functions, each intrusted to a clerk or a group of clerks. The clerks are:

1. The routing clerk. His duty is to plan the routing of the work through the factory. He determines when work is to be started and what workmen or machine is to do it.
2. The instruction card clerk. This clerk makes out careful instructions for the workmen to follow. In order to enable this clerk to give such instructions he must be supplied with information from the drafting room, and from the scientific laboratory, where experiments are constantly carried on. He may also receive information which has been filed by the
3. Cost and time clerk. This clerk collects all information of past performances, showing the time required to perform a certain piece of work, and also such information as may become available through the laboratory which carries on all time studies. This clerk determines the standard time for each piece of work. This information is also entered upon the instruction card, for, as we shall see later, a workman under this method of management is usually rewarded with reference to whether he performs a "standard task," or whether he falls below it or exceeds it.

As a cost clerk, the clerk collects all information which comes to him from the shop in regard to the time spent in finishing a job in all its various stages. This information reaches him on the workmen's cards which give the rate of pay of the workmen and

the time spent on each job. From this information the clerk makes up the *job cost* and the *time sheet*. The latter is a statement of the wages due to each workman.

4. The shop disciplinarian. He settles disputes between workmen among themselves, between workmen and foremen, and looks into questions which are submitted to him by foremen or planning department officials, whenever the human element is involved. In this way, the disciplinary control over the working force is taken out of the hands of the shop foremen as being a managerial function.

In the shop the only work that remains now is to execute the work by following the instructions intelligently. It cannot be said that the workmen and foremen need not exercise thought because a part of their thinking has been done for them—they are as much required to think and to be wide awake as an automobile driver when passing through a crowded street. He knows the rules of traffic, he knows he should not try to push the car in front of him, nor stop so suddenly as to cause a collision with the car behind. His instructions are all clear, he knows the mechanism of his car, and yet it can hardly be claimed that he does not need judgment and intelligence. In the case of the workman in the shop, so much is left for him to determine that one of the most important functions of the foreman is to instruct him

and aid him in following instructions and in achieving the standard set for the work.

As far as the supervision of the work of the shop is concerned, this also takes on a different aspect when scientific management is introduced. The foreman who looked after everything is now supplanted by specialists:

1. The instructor or gang boss, who aids the workman in following instructions and teaches him to reach the greatest efficiency.
2. The repair boss, who sees to it that the machine is in good repair.
3. The machine speed boss, who adjusts the speed and oversees the transmission of power.
4. The inspector. This specialist is necessary because without him workmen might be content to increase their output at the expense of quality.

The Human Factor. In the shop the work is done not only by machines but by men and women. Up to this point we have spoken of efficiency in management as if it were principally a matter of finding the right tool and the right machine for the purpose.

But the whole question of machinery and tools is secondary as compared with the problem of securing maximum efficiency from the human factor in production.

The term *maximum efficiency* has an antagonizing effect upon the minds of many people. They at once think of a cruel, unfeeling slave driver speeding the

worker to ever greater and greater exertion, and greater output until at last, broken in body and spirit, the worker gives way to others.

Maximum efficiency cannot exist under such conditions of management. True efficiency is not measured solely in the output of to-day, but in *sustained output*, and it is impossible to maintain a rate of output which is procured at the sacrifice of health and vigor. In order to secure true efficiency the workman must be made the subject of careful study. Such a study of the human element and the subsequent changes in technique will usually require the following steps:

1. Careful analysis of the work.
2. Elimination of all unnecessary motions.
3. A thorough training in the necessary motions so that the right rhythm and speed is obtained.
4. Careful attention to the comfort of the worker and
5. Well-planned rest periods.

Motion Study. When watching a group of men at work, one is very soon impressed by the fact that some seem extremely industrious, while others are slow-moving and deliberate. There is a great temptation to jump to the conclusion that the easy-going man is lazy, and is far less productive than the active fellow. It is a curious thing, however, that the very opposite may be true.

The reason why one man seems so much more active than some other worker at the same task is that

he "fusses around," goes through a great many unnecessary motions. Once this is recognized it is easily seen that efficiency can be increased by eliminating all unnecessary motions, and by concentrating upon those which are really productive. Greater output may then be secured with the same amount of energy.

In *The New Industrial Day* Mr. W. C. Redfield states this in the following words:

The day of the "rule of thumb" in our factories is not yet ended, though its sun is setting. Many superintendents manage to-day as they managed of yore—true offspring of the industrial conditions under which they grew up. There is a fearful waste of energy, of human strength and thought, and even of life, and waste also of time and of material and of attention given relatively trivial things, while more serious matters pass unnoticed. We have depended much heretofore on mere drive, or as we call it "hustling"—crowding into the compressed hours of busy days more and more, and winning out by intensity of effort and by dint of strenuous application rather than by the scientific efficiency which saves all waste and applies the principle of the least effort to produce the greatest result.

Many unnecessary motions often result from the fact that the raw material is not placed conveniently, and that the finished product may have to be removed by the worker to some distant point. The saving which may result from eliminating these un-

necessary efforts is easily seen. It is more difficult, however, to discover the unnecessary motions in the performance of the work itself. One way to discover them is to take moving pictures of the workman as he works and to study these. The paths over which his body and his hands travel may then be studied, and all unnecessary motions may be isolated. It is quite possible to study such work without the use of a camera, though it frequently requires a skilled eye to see just what is going on.

What can be accomplished by a study of this kind is well illustrated by the classical example of the bricklayer. People were laying bricks as long ago as the days of the Babylonians. It was, therefore, reasonable to expect that of all work, the laying of bricks would be one of the most efficient. But evidently experience and traditional workmanship have much to learn from scientific analysis. It was discovered that an ordinary bricklayer goes through at least eighteen or nineteen motions to lay one brick. By changing the position of the bricks and of the mortar, by raising the scaffold so that the bricklayer never needed to exert himself to reach the top of the wall, by careful mixing of the mortar which made it unnecessary to give the brick the traditional taps to make it slide into place, and by a few other similar small changes, the number of movements was reduced from eighteen to from four to six, and the output increased from 1,000 to 2,700 bricks a working day.

Gilbreth, one of the early exponents of scientific management, describes his experiences at the Industrial Exposition of London, where, after watching a girl at work for a short time, he introduced a number of improvements which resulted in a reduction of the time required to put a paper cover on twenty-four boxes, from forty seconds to twenty-six and finally to twenty seconds.

After all, in these wonderful performances there need be little that surprises us, for we constantly see all around us examples of similar increased efficiency resulting from an analysis of the work, followed by instruction. The touch method of typewriting is a good case in point. A careful study, eliminating all unnecessary movements has preceded careful training so that the right habits may be formed. Much of the workman's inefficiency is the result of wrong habits, which he acquired partly through imitating others from whom he learned his trade, and partly through individual variation. It is a part of the management of a factory to see to it that the workers acquire the right kind of work habits. Given the right kind of tools, it is possible to arrive at the best way for a man to work with the tool. It now rests with the management to make it worth while for the workman to learn to do his work in this one best way, to break old habits, and to acquire new ones.

Rest Periods Must Be Planned. It must always be remembered that maximum efficiency cannot be ob-

tained by *driving*. A wise manager not only frowns on driving by foremen or superintendent, but he protects a workman against his own ambition. Rest periods of sufficient frequency and length to allow for complete recuperation are absolutely essential. This means not only that the working day must be short enough to allow for ample rest in the evening and during the night so that the worker may return refreshed to the morning's work, but it also means that the work must be interrupted whenever a certain degree of fatigue is reached.

The experience of managers is practically unanimous that a change from a ten-hour day to an eight-hour day has resulted in more work of a higher quality. This must not be taken to mean that therefore six hours is better than eight, and four better than six—a certain amount of fatigue is a good thing, physically and mentally. The man who never works past the first feeling of fatigue until he gets his "second wind" never discovers his latent strength, and gradually deteriorates. Many people think they are tired when they are merely lazy and have not even started to exert themselves.

Two examples may be quoted to show how more rest resulted in larger output. In one bicycle factory 120 girls worked ten and one-half hours a day. The manager called in a scientific management expert who, after bringing some minor improvements, cut the working day to eight and one-half hours and

allowed one ten-minute rest period in the middle of the fore-noon and one in the afternoon. It was discovered that thirty-five girls were now able to do the work which once required 120 girls.

H. L. Gantt tells of a bleaching plant where besides forty-five minutes for lunch, the girls were allowed two forty-five minute rest periods during the day. The work was extremely fatiguing and Gantt suggested that the day be divided into working periods of one hour and twenty minutes each, separated by twenty minute rest periods, while spare hands filled in during the intervals. The result was a better spirit, better health, and an increase of 60 per cent in the output.

Other Considerations. It is not sufficient that the worker be given ample time for recuperation; unless this time is wisely spent, the leisure period may leave him less fit than it found him. The manager has a direct interest in the kind of pleasures that attract the workers and in the morality and the intellectual life of his employees. How managers aid their employees in improving themselves, in cultivating habits of thrift, and a high standard of pleasures will be described in the next two chapters. In the same chapters will also be studied the methods used to give the workman a vital interest in his own efficiency and in that of his fellow workers.

Summary. The manager brings together the various elements of production and organizes them into

a working and producing organization. The efficiency of this organization depends largely upon the willingness on the part of the workers to co-operate and upon the efficiency of the physical plant. The problem of management is primarily a human problem. Management resolves itself into the following questions: How must the work be divided among the personnel? Who shall bear the responsibility for the different functions? How shall the efficiency of each man be controlled and increased? Different types of internal organization are found. The line organization is most common. This may be modified by adding planning departments, or by a subdivision into many smaller departments. Scientific management is another type. This rests on the application of the laboratory method to industry, and on the separation of all work into functions. No method of management is successful which neglects to take full account of the human factor.

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QUESTIONS FOR FURTHER STUDY

1. What is meant by the *line and staff* organization?
Duncan. Chapter XIII.

Parsons. Chapter I.

2. What are some of the criticisms of scientific management?

Reference: Duncan. Chapter XIII.

Jones. Chapter VII.

3. Do high wages always mean high costs?

Reference: Redfield. Chapters II, IV, V.

4. What is meant by *democratizing industry*?

Reference: Gantt. Chapter I.

5. In what respect does the *scientific attitude* differ from the traditional method of approach to business problems?

Reference: Jones. Chapter I.

Redfield. Chapter I.

TEST QUESTIONS

1. What is meant by a *production order*?

2. What are the fundamental principles which must be observed in all systems of management?

3. Why is it desirable to install a planning department in a factory?

4. How is the shop organized under scientific management?

5. Can you explain how the principle of functional management would work out in the management of a baseball game, or of a dramatic performance?

6. Most people give little thought for the future. They do not look far ahead. Suppose that you were asked to apply the method and principles of scientific management to securing the greatest efficiency in the management of your own life; how would you proceed?

CHAPTER VIII

THE WAGE QUESTION

What the Employer Buys. In the preceding chapters we saw that more and more business men are beginning to be convinced that it is possible to analyze work in the shop and even in the office and to discover how to do a piece of work with maximum efficiency. The employer's next concern is with the willingness of the employee to break away from old habits and to learn to work according to new methods.

The first method that suggests itself to secure the co-operation of the workingman is to give him an interest in the output. He must be made to realize that his earnings depend upon his performance. This opens a fundamental question in the wage situation, namely, "What does an employer buy when he hires a workingman?"

He Buys a Workingman's Time. The Day Wage.

Some claim that he buys the workingman's time. This is the point of view that lies at the bottom of the old *day wage*, i. e., every man receives a daily wage irrespective of the amount of work he does. He *checks in* in the morning and *checks out* in the even-

ing, and he receives pay according to the number of hours he spends in the plant or store.

The advantages of the day wage are easily seen. It is simple and it assures the worker a regular income. He may, therefore, adjust his standard of expenditure to his wage and feel fairly certain that he can meet his bills as they fall due.

The disadvantages are equally apparent. It is impossible to give a real incentive for good work to the workingmen. They all receive a day wage and this wage is determined by the kind of work demanded of them with no definite relation to the amount they do. It is to the interests of the management to make the workingmen work as fast as possible, but the interests of the workingmen are directly in opposition to this. He is anxious to work as little as he can for the wage he receives. Some few really good workmen who like to be active, who get pleasure out of work for its own sake, are exceptions, but most of them must be driven to work.

Employers, therefore, introduce all kinds of schemes to make their men work. They adjust the production centers so delicately that the machine-speed forces men to keep up a certain rate of speed. They introduce more highly paid workmen who set the pace. They pay high wages to foremen who know how to "get the work out of the workmen." They allow these foremen the power to hire and fire the workers and to hold the fear of discharge over

their heads as a weapon. The workmen dealt with in this way naturally feel more or less resentful. Many of our industrial disturbances may be directly traced to this situation. The most objectionable feature of the old-fashioned method of payment is that workmen are dealt with in a group. A man is a carpenter or a bricklayer or a rigger, and the wage he receives is the wage of the group. As an individual he is nothing. If he is anxious to increase his earnings, or shorten his working time, he must combine with others in his group to press the demand. The employer, therefore, is to a large degree himself responsible for the power of the labor unions, the existence of which many employers deplore.

The unions have made the weaknesses of the old system of management their strength. By paying men a group wage, their group consciousness is awakened and their solidarity increased. When changes in the method of payment are proposed, unions usually resent them for in community of interest lies the strength of their organization.

The fact that the good worker receives the same wage as the poor worker means that in the actual wage some kind of compromise is struck in which the good man receives less than he is worth and many poor men receive much more. The good worker resents this situation but sees no way out, for he feels that only by solidarity can he hope to maintain his position. The poor worker is constitutionally a mal-

content. Most poor workers are; they are usually unwilling to admit their own shortcomings and seek to shift the blame upon others. We all know this type of person. When skating, playing tennis, or running it is never he that loses the match. His skate was out of order or the balls were old, and someone ought to fix up that track. The good sportsman plods along without complaining and wins the race.

The employer should not be satisfied with the day wage, not only because it does not supply the right kind of motive for work, but because he bears all the losses that result from disloyalty and laziness. The fact that he receives all the benefits of conscientious effort does not quite offset the disadvantage that he is never certain what a job is going to cost.

He Buys Output. The Piece Rate. The principal defects of the day wage are that it does not give an incentive for work and that the interests of the workman and employer are antagonistic. Many employers have hoped to remedy these defects by paying not according to time spent but according to the number of units of output. In other words, they pay a piece rate. They pay so much for every piece produced whereby the total earnings of a workman depend entirely upon his productivity.

This method of payment has many advantages. The workman now knows that his earnings depend upon himself; he will work faster and with greater interest in his work. The employer gains in two

ways. He gains first of all in that he knows what the wage cost will be of each piece produced. In the second place, he gains because the greater the amount produced in his factory the less each unit of output bears of the total *overhead* or general expense of the plant.

Both employer and employee have an interest, therefore, in large output. In so far their interests are parallel. It is not necessary to have a pacesetter or driver in such a factory, and this helps to create a better feeling between employer and employee. In place of the drivers it is necessary, however, to appoint inspectors to scrutinize carefully all work produced, for workmen when paid by the piece may increase quantity at the expense of quality.

There are objections, however. The workman is not assured a minimum day wage. He is, therefore, somewhat in uncertainty in regard to his earnings, though this is no very grave objection. There are other reasons why workmen generally oppose this method of payment. One of the most commonly found objections is the one that it breaks down the union. This cannot be denied. The solidarity of the group is endangered as soon as the group wage is done away with. Men become individuals, dealing with their employers and receiving a wage set by their own output with little reference to others performing the same work. Nevertheless powerful

unions are found in trades in which a piece rate is the prevailing method of payment.

The most serious objection is based on the fear that the rate will be cut. This fear is not unfounded. Many shortsighted managers have used the piece rate plan merely as a means of finding out how much a workman could produce only to cut the piece rate enough so that the total rate received for the maximum output was no more than the original day wage. Through such unfair practices, the workmen's suspicions of the motives of all firms installing a piece rate have been aroused and the benefits of piece rates have been much lessened. The fear of the rate cut often induces workmen to continue their policy of soldiering even under the piece rate plan, so that the employer may not discover their maximum capacity.

Need for Accurate Information. Not all employers who have cut rates have done so as a part of a definite plan of deceit. They feel justified in so doing because the difference between the piece rate wages and the old day wage showed them how grossly negligent and lazy their working men had been in the past. A piece rate based upon the output under day wages often leads to a wage three or four times the original day wage. Nothing will destroy the confidence of the workman in the management so completely as a cut in the piece rate. This must at all cost be avoided. The only way to arrive at a piece rate which need not be cut is to determine the normal output of

workmen before setting the rate. In other words, a piece rate cannot be set by guess work or by a majority vote, but must be set after a careful study of the work. The work should be analyzed; the best way should be discovered; the tools and methods standardized; and the time which the work should take determined. The piece rate may now be set without fear that a cut may later be thought necessary.

Co-operation between Employers and Employees.

The question is often raised whether employees should have a voice in the setting of the piece rate. As long as the actual working time required for work is not accurately known, one man's guess is as good as another's. Once the time required has been determined by an elaborate process there is little room left for argument. The only question left for argument is whether the day wage, made possible by a normal amount of work according to the standardized methods and the piece rate set, is sufficient. Once the normal day wage is agreed upon the piece rate is then quickly determined, but unless both the normal daily earnings and the normal amount of work are determined in co-operation with the workers it will be difficult to convince them that everything was arrived at fairly. Co-operation in the determination of time, task, and rate holds out the greatest promise for industrial peace.

It is no easy matter to determine the time required for a certain piece of work with accuracy and fairness.

It must be plain that the output which was normal under the old day wage forms no standard, for the time required for each unit of output contains a large amount of time spent in "soldiering." How to eliminate this dead time is the problem which now confronts us. In most factories the managers are satisfied if they secure the co-operation of a few of the higher grade workmen. After determining their average time the piece rate is set with reference to it. Usually the rate is set a little higher so that it may not work a hardship upon the less able workmen. Such a method is not absolutely accurate but is accurate enough for most purposes.

He Buys Output and Time. The Task. Some hold that the employer buys both time and output. Maximum efficiency cannot be attained unless every element in the factory is keyed up to a high pitch of work. The employer is interested in large output because it cuts his overhead charge per unit of output. In terms of labor this means that he can only afford to employ men who possess a certain amount of productivity. He must therefore make it worth while for all men to reach a normal amount of output, or task.

The best method of payment, so they claim, is to pay a workman a certain rate per hour; this assures him a steady income. This rate is made low for all who fall below the task and high for all who reach the task and who exceed it. A similar result may be

obtained by paying two different piece rates, one the lower, to men falling below the task, and another, a higher rate, to all who attain or exceed the task.

In each case the rate would then be arranged in such a way that any workman not reaching the task would make only a very moderate wage while those reaching the standard of efficiency set are rewarded quite liberally.

To give an example. Suppose that a piece of work should take four hours to perform, and that the rate per hour for a workman who reaches this normal rate of output is fifty cents per hour; then the slower worker may not receive more than twenty-five or thirty cents. In fact the hour wage may grow smaller and smaller the less efficient he is. This seems not unfair in principle. From the employer's point of view it is logical, for a slow worker means an inefficient use of machinery, tools, and working space, and an accumulation of goods in process and consequently an increase in the overhead burden.

A different problem is introduced when the rate of pay above this normal task is set. Suppose that the workman succeeds in finishing two pieces in the time set for one. What ought the hour rate to be? The workman may well argue, "The normal cost to the factory which is considered fair, is fifty cents an hour for a four-hour job, or two dollars for the job. In case I, through my greater energy and efficiency, succeed in making two pieces in the same

time, I should receive two times two dollars, or four dollars, for these four hours. The cost of each piece to the factory would still be two dollars and my employer would receive the benefit of an additional saving in overhead."

This indeed sounds logical, and corresponds to the view taken by some managers. Others, however, remark against this. "This reasoning holds good only if we agree that you are selling me your output when I hire you. Now I believe that output is something you cannot very well sell, for it is something in which I work with you. I supply the machines, the place to work, and the raw material. I carry on laboratory experiments to discover the most efficient methods, and I take the trouble to teach you. I don't deny that you are worth more to me when you do good work than when you loaf. That is the reason for my paying you higher wages as your efficiency increases, but I am not going to give you all the saving that results from your better work. That is what you ask when you say: 'Pay me two dollars a piece after I reach the task.'

"I also admit that you must be paid something extra for cutting the time set. I contend that we should divide this saving between us. You ask why? Because I am not buying your output, which, as I explained, is not yours; I am buying your time. You have come to work for me a full working day. If you can finish two pieces in a half day while some

other man needs a whole day to do as much, that does not mean that the rest of the day is all yours. You are still working on my time and benefiting by my co-operation."

Many wage schemes have been devised to bring about a method of wage payment which would satisfy this latter argument. One of these methods is in short as follows: A day wage is guaranteed to every workman. Those who attain a moderate task receive a part, say one half of the wages of the time saved. For instance, a workman earns thirty cents an hour, and is asked to do a task normally requiring eight hours. He performs this task in six hours. His earnings would then be:

$6 \times 0.30 = \$1.80$ which is his pay for the time worked, plus $\frac{1}{2} \times 0.60 = 0.30$ which is his share in the saving in the cost of labor, or a total of \$2.10. This he earns in six hours which means that his hour rate has increased from thirty cents to thirty-five cents. If eight hours constitute a day, his day wage would be increased from \$2.40 to \$2.80. This method of payment was proposed by F. A. Halsey, a manufacturer of Sherbrooke, Canada, and is spoken of as the Halsey plan.

There are many other similar wage plans such as the Rowan premium plan, the Taylor differential piece rate system, and the Emerson efficiency wage. These different methods of payment all have one thing in common, *i. e.*, they set a task, and the wages

received by the workmen are determined with reference to the task. They differ mainly in three respects.

1. The method according to which the task is determined.
2. The degree to which the workman is allowed to share in the savings.
3. The degree to which the workman is penalized for not attaining the task.

Some of these wage payment plans, such as the Taylor differential piece rate and the Emerson efficiency wage, give the entire savings to the worker.

Other wage systems give a portion of the savings to the management.

Setting a Task. The setting of the task now becomes a matter of great importance. It is quite important under a piece rate plan, but it becomes even more so when all those not reaching the task are paid but meager wages and a substantial increase is allowed as soon as the task is reached. In fairness to all concerned, both employees and employers, a task should be set accurately and fairly. A scientifically determined task is therefore the first requisite for the satisfactory operation of any of these more elaborate wage systems.

The Taylor system of payment places more emphasis than any of the other wage systems upon an accurately set task and upon the attainment of it by the workmen. The other wage systems allow a greater degree of elasticity. The Taylor system is

therefore workable only where a complete system of scientific management is installed and a task is set after careful time studies of the standard performance of well-trained workmen. When making such time studies, assistants with stop watches time accurately every separate operation as performed by the workmen who are being studied.

A time study of the various elements which together constitute a complete operation is called an *elementary time study*. From the data obtained by this study the task is calculated. Studying each element separately instead of timing the working period as a whole leads to better results. First, because any attempt to stretch the time in any part of the work is more easily detected, and second because this information may now be filed away and may be used later to calculate the time for other pieces of work which, though different, require many of the same operations.

Where no attempt is made to maintain scientific management, tasks are often determined according to the average past performance of the better grade of workers. This is not accurate but is quite workable provided the difference between the earnings of those who achieve and those who do not achieve the task is not made too large and too abruptly.

Summary of Wage Payments. To summarize the whole matter in a few words. There are various ways of paying workmen: the day wage which is

based on time; the piece rate wage based on output; and a number of payment plans which are built around a more or less carefully set task and which in theory at least, recognize both the time and the output as a basis for payment.

In general that method of payment is most desirable which calls forth the greatest degree of co-operation between the workers and the management. It cannot be said that any one method of payment is the best, for circumstances, the type of management, the type of workmen, and the character of the industry will determine which method is best adapted.

The Demand for Standardized Conditions. In the preceding chapter we mentioned the need for standardization of working conditions. At that time it was probably not clear why the standardization was of such great moment. This ought now to be clear. The workman who is asked to work under a method of wage payment which calculates his earnings according to output, especially if a task is introduced, has a very vital interest in the conditions that surround him. He reasons somewhat like this:

"That plan appeals to me for it makes it worth my while to do the best I can, and the better I do, the more I earn. That strikes me as fair. There is one thing I want to make sure of, though. It would not be fair to have me suffer a loss in wages because your machines are out of order, or because you do not

have the raw material ready in the proper place and at the time when I need it. How can I reach my task, how can I increase my output, when I have to run all over creation to find my tools? In all fairness to me the management must see to it that I have the right kind of raw material at the right time, and that all these things are in good condition."

This is the thought back of the demand for standardized working conditions. This demand is very reasonable and fair. The system of management which we have called *scientific management* is based on the recognition of the justice of this demand. In short it means:

1. Discovering the right standards with scientific accuracy.
2. Maintaining the right standards.
3. Training the workers to reach a reasonable task.
4. Placing all management functions in the hands of the management.
5. Rewarding the workers according to whether they reach the task set or fall short of it.

The need for the functional foremen discussed in chapter VII, such as the repair boss, the machine speed boss, and the instruction card clerk is now apparent.

The Group Bonus. Not all industries are of such a character that it is possible to determine the output of each individual. Take for example a soap factory. A large vat must be kept boiling for several days,

and different shifts of men tend the fires and look after many small jobs about the vat. How could the output of one man be determined? Again, take a firm of house painters which sends its men out to paint the interiors and exteriors of houses. How much and how well does each man paint? This can not be answered easily, if at all. Again in an automobile factory some fifty men may all be engaged in the assembling of autos, but who can say what each individual contributes to the total amount?

In such factories a *group bonus* is sometimes paid, or a *group piece rate*. Every workman in the group is then vitally interested in the output of the group. In many factories this method has worked out very satisfactorily and has resulted in a keen sense of co-operation between the workmen.

Profit Sharing. All the wage payment schemes discussed so far are based on the thought that the employer hires the workmen to do a certain amount of work. The amount paid in wages rests upon the value of the work to the employer calculated with varying degrees of accuracy. The wage is an element in the cost of production. It is often desirable to give the workmen an interest in the success of the business as a whole. They are, therefore, not only paid a wage, as in any other business enterprise, but in addition receive a share in the profits of the business. They appear twice on the books of the firm, once as an element in cost and a second time

as a participant in the distribution of the income. This is called *profit sharing*.

It may be said that a working man has no right to a share in the profits since these were secured not through his work alone, but through his work combined with that of a large number of others; that is, clerks and executives working in the offices and selling the goods to the customers. But this argument does not hold very well since this is not the question involved. The question is how to give the workmen a vital interest in the concern as a whole, and this is frequently accomplished by profit sharing better than by any other plan.

In the soap factory above mentioned and also in the painter's firm, individual efficiency cannot be easily determined, and it is difficult to supervise the workers. In such a case profit sharing may prove a very excellent way to stimulate in the workmen an interest in the business. They are not so likely to loaf, to waste material, to turn out bad work when they realize that such actions result in lessened profits, which means a lower income to them.

That the amount which they are to receive as their share in the profits cannot be calculated except once a year or once every six months, and that, because of this long period the workingmen may fail to realize the relation between their faithfulness and the share they are to receive, must always be admitted. But on the other hand a profit sharing plan

frequently results in inducing men to continue their connections with a firm longer, because they do not want to sacrifice their share in the profits they have helped to earn, by leaving the employ of the concern. This means that the firm secures a stable and faithful labor force.

Many such profit sharing plans are in operation, both in this country and abroad. Very often the share in the profits is not paid out in cash, but is used to buy shares of the company, thereby making the workers part owners of the undertaking. Among the many well-known examples are the Maison de Claire in Paris which originated profit sharing in 1842; the Bon Marchè, also in Paris, almost entirely owned by its employees; the Dennison Manufacturing Company of Boston; and The Clipper Belt Lacer Company of Grand Rapids, which inaugurated a profit sharing plan in 1903.

It must be clearly understood that profit sharing may very well go hand in hand with any of the systems of wage payment above discussed.

The Wages of Store and Office Workers. The work of office employees and store sales people is less readily standardized than the work of a factory employee. Girls taking dictation may differ greatly in their output merely because one dictator is more speedy and makes less mistakes than another. The introduction of office machinery has aided much in

standardizing the work of the office. The dictagraph, for example, places all typists on more nearly the same basis and makes frequent waits and interruptions less necessary.

The result of this increasing standardization is a growing tendency to pay office help according to output. This principle has in many offices been applied to the typists. Careful records are kept of the amount of work done by each in terms of lines of typewritten material and of the mistakes made.

It would never be quite fair to pay each girl strictly according to the result of these records. Office work can never be so neatly standardized. Some firms, for example the Burroughs Adding Machine Company, classify the typists according to groups, each receiving a different weekly wage. A girl remains in any group as long as her work does not on the average fall below 60 per cent of the amount of work set for the group. In case she does more than 60 per cent she receives a bonus. Should she reach 80 per cent of the task for four weeks, then she is placed in a group with a higher task and she receives a higher weekly wage. The method is adapted to office workers because the groups very gradually increase their tasks, and within each group a girl may vary as much as 20 per cent of the quota.

Perfect standardization or task setting is not feasible in a retail store. Other methods to give the employees an interest in their own efficiency must

therefore be devised. In some retail stores sales people are paid a certain per cent of their sales. In other stores they are paid a straight weekly wage, but a record is kept of their sales, and when it is found that their wages are larger than a reasonable percentage of their sales, they are discharged or transferred to some other department.

Relation of Workman to Employer. Finally it may be pointed out that more and more it is being realized that no really permanently satisfactory method of payment can be devised unless the employees are in some way allowed a voice in setting the rate, and are allowed to share in the management of at least that part of the enterprise where they perform their work.

Where a task is set they should know the processes by which the task was determined. Where profit sharing is introduced it should be real profit sharing, not a gift blindly accepted, but a definite percentage of profits fixed in advance. Properly appointed representatives of the workmen should have access to the books, and a definite policy of income on a reasonable investment should be agreed upon. In short, both sides should place their cards on the table.

Many factories are endeavoring to give their workmen a genuine voice in the matters of pay and working conditions by the establishment of committees of which executives and representatives of the workmen are members. This is a hopeful sign that

the new industrial day is breaking, in which capital and labor will be partners in fact and in spirit, and not only in name. In such reforms lies the hope of our industrial civilization, for in the words of President Wilson in his address of May 30, 1919:

“We cannot go any further in our present direction; we have already gone too far. We cannot live our right life as a nation or achieve our proper success as an industrial community if capital and labor are to continue to distrust one another and to contrive how they can get the better of one another.”

Summary. The workman may be looked upon from two angles. He may be considered as selling his ability and strength to the concern. Or he may be looked upon as a partner. The first concept is best illustrated in the day wage; the second finds its best expression in profit sharing. Between these two extremes there are a number of other possibilities which recognize both principles. The tendency in business is more and more to pay men according to their ability and to give them an increasingly important share in the control of the concern.

REFERENCES

The same as the preceding chapter. Additional reference:
J. W. Schulze. *The American Office*. Key Publishing Company.

QUESTIONS FOR FURTHER STUDY

1. Draw charts showing:

(a) The cost per piece under the day wage with varying output

(b) The cost per piece under a piece rate with varying output

(c) The hour rate of the workmen in each case

Reference: Jones. Chapter XIII.

2. What are the principles of task work?

References: Gantt. Chapter III.

Schulze. Chapter VIII.

Parsons. Chapters VII, VIII, IX.

3. What is *scientific management*?

References: Jones. Chapter VII.

Gantt. Chapter III.

Duncan. Chapter XIII.

4. What is a *fair day's work*?

References: Jones. Chapter XII.

Gantt. Chapter IV.

TEST QUESTIONS

1. What are the advantages and disadvantages of a day wage?

2. If you had the choice, under which method of wage payment would you prefer to work?

3. Why do workingmen often object to the piece wage?

4. What argument lies back of the demand for standardized working conditions?

5. What is meant by a *task*? And how may a system of wages be built around the task?

6. What is a *group bonus*?

7. What type of undertakings are particularly adapted to a profit sharing plan?

CHAPTER IX

THE SERVICE DEPARTMENT

What Is Included in the Service Department? In many factories and stores several functions are grouped under the name *service department*. The following offices are usually included:

1. The employment office
2. The educational office
3. The health office
4. The welfare office

The general term *service department* is coming into use quite generally for it not only describes the purpose of the department accurately, but it is to be preferred to *welfare* which always carries a suggestion of charity.

The Employment Office. The employment office is in charge of the hiring and discharging of workmen. Such an office is by no means found in all business houses but there is a growing realization of the benefits which result from its establishment.

In most business concerns the hiring and firing is done by the foreman or, in the office, by some departmental head. This is very inefficient. One of the fundamental requirements in an efficient organ-

ization is the selection of the right kind of workers. The average business executive or foreman has neither the time nor the knowledge which are required to make a careful selection from among the many applicants. Everything else in a factory or store is usually in the hands of specialists. The shoe buyer would not undertake to buy the millinery any more than in a factory the expert salesman would undertake to select the lathes for the shop. The employment of labor in many concerns is still looked upon as everybody's work and with disastrous results.

Labor Turnover. In terms of dollars and cents the absence of a centralized employment department means a loss to the firm. During the war many studies were made of employment conditions in industries in this country with surprising results.

It was found that most plants had practically the same experience. Workmen came and left again after a short period of employment. In order to supply the required number of workmen to any plant it was necessary to hire many times that number. The West Pennsylvania lines were compelled to take on 84,000 new workers during an eight months' period in order to keep 2,000 jobs supplied with men. These figures are but typical of a condition which even in normal times prevails in many industries.

The ratio of the number of men taken on during a given period to the average number of employees

actually employed constitutes the "labor turnover" of a concern. To give an example:

Suppose 150 men entered the employ during the week, and that the number actually at work during the six-day week was: Monday 1150, Tuesday 1200, Wednesday 1170, Thursday 1100, Friday 1010, Saturday 1000; then the average number employed during the week is 6630 divided by 6, or 1105. One hundred and fifty additions a week is 52 times 150, or 7800 a year. To keep the factory continually supplied with an average of 1105 men during the year requires, therefore, 7800 new men or 705.6% of the average working force. The Pennsylvania lines above quoted had, according to this method of calculation, a turnover of $\frac{84,000}{2,000} \times \frac{12}{8}$ or 6300 per cent.

Labor Turnover an Expense. Wherever a large labor turnover is found, an important cause of high labor cost has been discovered. When a new man joins the working force he must not only be trained to do the job for which he was hired, but he must adapt himself to his new environment, become used to the location of his machinery and tools, and must become acquainted with the methods of the shop. While he is learning he is not producing his maximum output, and often slows down the speed of his own and neighboring production centers. He demands a larger share of the foreman's time and frequently spoils raw material and tools. In other words, it costs the shop money to train a new man. Some

shops estimate that it costs from fifty to two hundred dollars to "break in" a man.

A large percentage of labor turnover has also undesirable social effects. Quitting and looking for another job elsewhere very soon becomes a habit with men. They join the army of men who are habitually underemployed. From part-time employment they gradually drift into the class of chronically unemployed. Many causes are responsible for excessive labor turnover:

1. Unscientific hiring.
2. Lack of supervision of employment.
3. Absence of a method of discovering and encouraging latent talent.
4. Lack of co-operation between departments in the matter of employing men.

These various causes will now be discussed in detail and the part which a centralized employment office may play in remedying these conditions will be explained.

Hiring Men. It is impossible to hire the right man for any job or position until the requirements of the job are accurately known. It makes a big difference in many jobs whether a man is tall or short, and whether he wears glasses, or has exceptionally good eyesight. *Job analysis*, or a careful study of the position to be filled, should precede any attempt to hire men. Detailed *job specifications* should then be drawn up.

The advantages of such job specifications are many. Once all jobs in the factory are thus described in detail, the work of finding men for these jobs is much simplified. All guesswork is eliminated. The preparation of such specifications forces the executives to analyze the job, and to study its requirements. This leads to a better appreciation of the workman's problems and may often lead to the discovery of disagreeable features which may be eliminated or may bring out the justice of paying a higher wage. Without such detailed knowledge of the work done by each workman, a truly fair adjustment of wages and salaries is not possible. With this knowledge it is easy to determine whether men may be shifted from one job to another, and whether women, or less highly skilled, and therefore less expensive labor, may be substituted. One large manufacturing company uses the following card on which the foreman or manager is required to give the necessary information to the employment office.

STANDARD JOB SPECIFICATION

Copy for.....

Dept.....*mw*.....Class.....*Ia*.....Job Name...*All-round repair machinist*Description of Job.....*All-round machinist making
and assembling repair parts*.....

Nature of Work and Working Conditions:

Heavy.....Standing.x..Floor.....Quick.x..Dirty: .x..

Medium.x..Sitting.....Bench.....Slow.....Greasy....

Bench Mach.....Rough....Wet.....

Light.....Walking.....Floor Mach..x..Close.x..Clean.....

Continuously Repeated Operation.....Or Variety
of Jobs.....

Make of Machine.....

Length of Time Required to Learn Job.....*6 months*...Rates: DW or PW.....*dw*.....Starting Rate...*Average
earnings on PW*

How Soon Put on Piece Work

Requirements: *Schooling desired*.....

Necessary to Read and Write English.....x.....

Read Blueprints.....x.....

Tools Required.....*Full set machinist tools*Preferred Age....*35-45*....Height.....Weight.....*over 140*.....Nationality.....Previous Training orExperience Desired.....*Experience or repair work on
similar class of machinery*.....

Remarks.....

.....

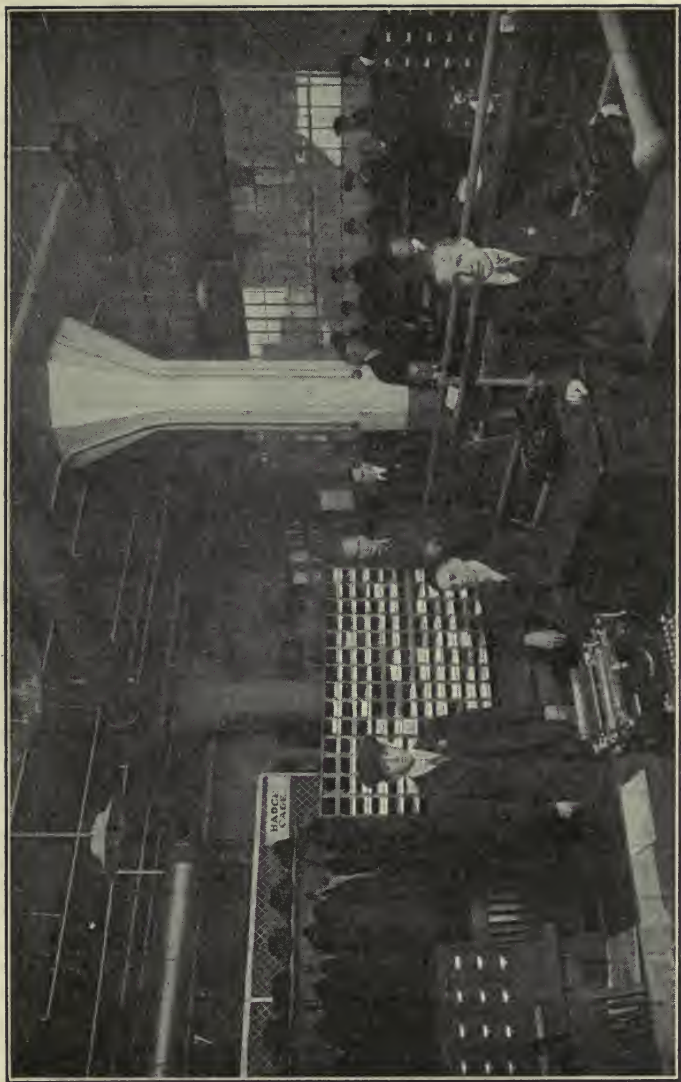
Dept. Foreman.....Employ. Dept.....

Supt.....Date.....

With such information at hand the employment office can select men intelligently and may readily shift them from one job to another, frequently filling new jobs that come open by transfer and promotion rather than by taking on new men.

Securing Applicants. The employment department should endeavor to have a sufficient number of applications on file so that openings that arise in the plant may be readily filled. This is especially desirable where it concerns jobs requiring special skill or training. At every business establishment applications for positions are constantly made, either in person or by letter. Nevertheless, it may be necessary for the employment office to make an active campaign for certain classes of applicants, for the larger the list to choose from the more successful the selection is likely to be.

Employment offices may use any of the following channels to place themselves in touch with possible candidates; by means of advertisements in the newspapers, recommendations from employees, the schools, Y. M. C. A. secretaries, or through public and private employment agencies. The applicants who present themselves at the office or who apply by letter should be required to fill out an application blank. The object of the application blank is to collect information about all applicants, which will allow the employment office to determine the fitness of the applicant for particular jobs. Such



Employment Department, Ford Motor Company

blanks may be large sheets or cards; they are filled out for future reference and become part of the permanent record of the employee. Such an application card may have the following form:

Form No. APMS

APPLICATION CARD

Date

Name

Tel. No.

Local Address

Home Address

Age

Weight

Last employed by

Married-Single

Nationality

Where

Position applied for

Length of time

Rate Date Quit

Years experience

Held position as

Also worked for

Position

Length of Time

Also worked for

Position

Length of Time

Recommendations

Can fill following positions

Remarks

The back of the card is frequently used to accumulate the record of the employee's work:

Name		Wkm's No.
Address		Tel. No.
Date started		Dept.
Position		Starting Rate
Rate changed to	Date	Dept.
Rate changed to	Date	Dept.
Rate changed to	Date	Dept.
Positions best adapted		
In case of accident notify		
Employed here before dept.		Rate
Left our employ date		Quit
Laid off	Temp. lay off	Discharged
Character		Workmanship
Remarks		

As will be observed the application blank gives a record of work with other firms and indicates other positions for which the applicant is equipped.

Filling Vacancies. As the various departments of the concern are in need of men they send in their requisitions, and the employment office will proceed to fill the vacancy. Where possible, such openings are filled from among the men already employed by the firm. This may mean that someone is promoted to a position requiring greater skill and commanding better pay, or that he is given the opportunity to work in a job more in accordance with his preference expressed when he was hired.

This brings out two principles in handling men: Find out what they like to do, and as far as possible give them the opportunity to show what they can accomplish in the work of their choice. Men will be happier when doing work in which they are interested than when kept at uncongenial tasks. They will also work with better spirit in work they do not like as long as they know that faithfulness will be rewarded by promotion to their preference as soon as the opening occurs. The two principles are:

1. Let each man feel that he is in line for promotion.
2. Keep a record of the preferences, and fill openings wherever possible by transfers and promotion rather than by new appointments.

It is also possible that the surplus labor in one department may be placed to advantage in some other department which is temporarily rushed. Such methods make for smaller labor turnover and a

more satisfied and stable working force. Is it not plain now that only a centralized employment office can handle the employment of men efficiently?

Selecting the Workers. In case it is necessary to go outside for candidates, a careful selection must be made from among many applicants. It is no simple matter to select the one most suited for a particular position from among the large number of applicants.

Every executive likes to feel that he has exceptional ability in "sizing up" men. Many of them do possess a remarkable ability to form a fairly correct judgment about a man's ability and general personality from a short interview. Many, however, make serious mistakes in misjudging men. The question may be asked whether there is a scientific way of selecting men. The answer is that rapid strides are being made in that direction, but that as yet no absolute standards can be set up.

Psychological tests may be given, and are given by many employment offices with moderate success. The principle upon which such mental tests are based is that there are certain innate traits of the mind which determine mental development and adaptability to a certain type of work. The applicant's mental processes may be slow or quick. He may respond quickly to impressions from without or may be very slow to react; he may remember more readily things heard than things seen; he may be inclined to careful analytical thought rather than to

quick action. The tests of the psychological laboratory as used in the personnel service of the United States Army and in many private firms, make it possible to discover these fundamental traits. Too much depends, however, upon the skill of the one giving the test to make the results reliable except when procured by experts. Hence, a general use of these tests is not to be recommended unless conducted by carefully trained men.

A special warning is not out of place against the many fake schemes which are advertised by correspondence schools and book companies as infallible methods of reading character. The shape of the nose or a bump on the forehead of the applicant has no more to do with his character and mental ability than the position of the moon and the stars at the date of his birth. There is, at any rate up to the present, no truly scientific basis for any of these character reading schemes.

In each employment office there should be one or more interviewers who have a good knowledge of the various jobs that are to be filled. The education of the candidate, his general appearance, his method of approach, the way in which he answers questions, the record of his work before making application, may all lead to a basis for a fairly good guess regarding his general character and skill.

Vestibule Schools. Where young and inexperienced help is hired or where the work of the factory or office

is highly specialized, it is usually necessary, and always desirable, to give the employee a shorter or longer period of training. This training in what are sometimes called *vestibule schools* has two advantages:

1. The employee receives instruction in specialized work and becomes therefore more quickly adapted and more highly skilled than some one who is left to find his way independently.
2. The elimination of the poor worker, of the man who applied for a job for which he is not fitted, takes place before he enters the factory. He is under close supervision in the school and any deficiency is quickly detected. Such men are not necessarily discharged, but may be directed into some other line of work for which they are better adapted.

Mr. H. E. Miles of the Council of National Defense investigated a number of industries. In describing the training room or vestibule school established by one of these, he says:

The test of it is that of those who enter this factory only two or three per cent leave. About ten per cent are eliminated in the training room—the perfect place for elimination. The production of the training room workers in this factory is not far from twenty-five per cent greater than the untrained from the employment office.

It should be understood that these schools differ from schools in the ordinary sense in that all work performed is on a production basis; they are a part of the factory itself,

Introducing the Employee to His Surroundings.

One very essential aid in making the employee a real member of the company is to explain to him the organization chart of the company. He may then understand his relative position, and will also have a better grasp of the importance of many details and much "red tape" which otherwise he would not be able to understand.

In addition to this general information about his place in the organization, he should receive written instructions pertaining to his particular job. Many large firms, such as the Ford Motor Company, the National Cash Register Company, and the Alexander Hamilton Institute, have prepared attractive booklets which are given to new employees, in which the functions of the different departments, the policies of the company, the rights, duties, and privileges of employees, and the duties of the new employees are explained.

Record of Service. After the workman or office employee has been allowed to enter the employ definitely, it is necessary that a careful record be kept of all transfers, changes in rates, sickness, tardiness, and other information concerning him which in the future will be helpful as an aid in determining the fitness of the employee for the position he occupies or for some other position higher up. This information may also lead to the discovery of important facts. If the amount of sickness or tardiness, or the number

of accidents in one department far exceed that in another, an investigation may disclose conditions which, when remedied, will raise the general efficiency of the plant and will give the workers more adequate protection.

Investigation of Grievances. Where a centralized employment office is maintained, the authority of firing is taken out of the hands of the foreman or of departmental heads. This makes for greater harmony in the organization and a better feeling of fellowship. The foreman is no longer an absolute monarch. There is a direct appeal for any man who feels that he has a just grievance. The employment office makes investigations of complaints, whether they concern material conditions or persons, and endeavors to bring about friendly agreements in disputes and to eradicate evil conditions. The employment office should obtain the confidence of the employee as a fair arbitrator in disputes.

A Check on Labor Turnover. The work of the employment office should result in a lessened rate of labor turnover. All men recommended for discharge should be interviewed and their record since the beginning of their employment looked up. The employment manager should ascertain why the employee was recommended for discharge, and the employee should be given an opportunity to state his case. Where inefficiency is the cause, a study of the man's record should be made to ascertain whether

circumstances beyond the control of the employee may have been to blame. Bad health, family troubles, financial worries, or an antipathy for the foreman or some coworker may lie at the bottom of the whole trouble, or it may be that the man is working at an uncongenial task. In such cases a transfer to some other kind of work may save the man from discharge to the great benefit of his own future, of that of the organization, and of society. When discharge is necessary, a record should be kept of the discharge. The accumulated facts may aid sometimes in tracing a hidden source of trouble and in eradicating it. The following is a discharge blank used in one large western plant:

LEAVING NOTICE

CHECK	EMPLOYEE'S NAME	Dept.	Reason	Skill	Product	Depart.	Nat.	REMARKS
Re-employ Yes or No			Overset Laid Off No Notice Discharged	V. Good Average Poor	Fast Medium Slow	Excellent Regular Aptitude		
			Overset Laid Off No Notice Discharged	V. Good Average Poor	Fast Medium Slow	Excellent Regular Aptitude		
			Overset Laid Off No Notice Discharged	V. Good Average Poor	Fast Medium Slow	Excellent Regular Aptitude		

The employment office may also be instrumental in creating a better spirit in an organization by exercising thoughtfulness in regard to the many details of the relation between employer and employee which often are a fertile ground for friction. Such matters as the technique of wage payment are frequently looked upon as unimportant. From the workingman's point of view it makes quite a difference whether he is paid in cash or by a check, which

he may have difficulty in cashing except at some saloon or store, and then frequently at a heavy discount. These and a large number of other details are frequently overlooked, to the great detriment of an organization. The efficiency of a business establishment, of an army, of any organized group of human beings is determined by the *morale*, and the morale is shaped by a multitude of petty details which make life a burden or a joy.

The Educational Office. The work of the employment office is supplemented by that of the educational office. This office will usually take charge of the preliminary or "vestibule" training of the new employees, and will attempt to raise the intellectual level of the entire body of workers. Popular, illustrated lectures on current topics, evening classes in grammar school and high school subjects, and special vocational training are some of the more commonly found activities.

The General Electric Company, the National City Bank, Wanamaker's Department Store, W. R. Grace and Company, exporters, are examples in different commercial fields of firms which maintain special training classes. Originally started to give highly technical and specialized training, such schools have gradually come to the realization that general information and intelligence are quite as necessary as the purely technical training. For this reason many of these schools are now supplementing their technical

work with lectures on general sociology, philosophy, art, economics, and literature. These corporation schools have formed a society called the Association of Corporation Schools.

For the benefit of those interested in technical literature a technical library and a number of trade papers and technical magazines may be placed in a reading room, where, during the lunch period, a few profitable minutes may be spent. A circulating library is also frequently found. In many plants the educational department publishes a paper or magazine, where, besides interesting items about events and persons, much valuable information about the processes, policy, and marketing methods of the firm are given.

In some cases the educational work in hygiene is also in the care of the educational department, though in many plants this work falls under the care of the health department.

The Suggestion Box. Another important activity is frequently carried on by the educational department, namely, the administration of the suggestion box. In order to encourage the employees to take an interest in their work they are asked to make suggestions to the management. The suggestions are placed by the workmen in envelopes provided for that purpose and deposited in a box. Once a week these boxes are emptied and the suggestions examined.

In some factories a special suggestion committee composed of both executives and workmen investigates these suggestions. In other concerns the educational department is in charge of this inspection. Usually the heads of the departments affected by the suggestions express their opinion concerning their value. Usable suggestions are rewarded, sometimes by money rewards and sometimes by privileges. In one large eastern book publishing house all successful competitors are guests of honor at an annual banquet, and their prizes are handed to them at that time with an appropriate address by the general manager.

Many large department stores have the suggestion system. One large store in Seattle has found it very helpful and a number of improvements have resulted from its introduction. Such suggestions as to provide the trucks with rubber wheels, to change the position of a counter to allow for better light, to rearrange the receiving room—all dealing with small but important details, were the results of the suggestion system.

Health Department. Another very important department in the service group is the health department. The duties of this department are to give all new applicants a physical examination in order to determine their general condition of health and to locate any physical defects which they may have; to make periodic examinations; to provide treatment

in all accidents and in some surgical and medical cases; to co-operate with the safety department in establishing better sanitation, and as far as possible to render work safe.

The health department may also render valuable service in the drawing-up of the job specifications. Many jobs do not require fully able-bodied men. By means of carefully prepared job specifications men who otherwise would have been judged physically disqualified may become valuable workmen.

Safety and Sanitation Department. Another step in the direction of true efficiency is observed in the establishing of a safety and sanitation department. It is not necessary to explain in detail the duties and the work of such a department; its most important function is the elimination of industrial risk.

In this work the department will need the hearty co-operation of the engineering department. Some changes in the machines, small outlays for railings, for screens to cover exposed gears, and even for a quart of white paint with which to brighten up a dark corner may often save life and limb. A suggestion box maintained by the department often leads to valuable improvements.

One of the important phases of the work is to teach working men the value of safety devices. It is curious that many of them deliberately cast aside safety devices, and prefer to run the risk of injury or death. Many accidents that occur in the building of sky-

scrapers result from the refusal on the part of the workers to use the safety appliances placed at their disposal.

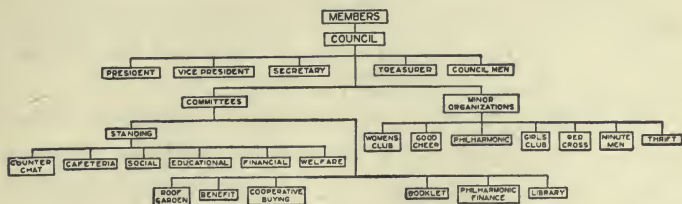
Welfare Work. The responsibility of the employer is not confined within the walls of the office or factory, nor would it be to his advantage to consider as of no interest to him how the employees live and spend their leisure, and whether they lay away something for their old age. Happy, enthusiastic workers cannot develop where home conditions sap the vitality and attack the morals of men and women. Poorly ventilated houses, lack of good nourishment, evenings spent at carousing and drinking instead of in wholesome amusement, mean inefficient, listless workers.

Many large corporations, realizing the importance of aiding their employees to attain and maintain good living conditions, provide wholesome recreation for them, establish building and loan funds from which the workers may borrow in order to build their homes, establish stores which supply the employees at cost, and encourage their employees to save by establishing a savings bank at the plant.

Some companies, like the Sunlight Company near Liverpool, and the Pullman Company near Chicago, have built model workingmen's villages. Here moderately priced cottages with ample gardens have been built by good architects. The workmen may rent these houses at a low rent and may often allow

the rent to apply on the purchase price. The Ford Motor Company, the Jeffries Manufacturing Company in Columbus, and a long list of the most progressive companies in this country and Europe, have undertaken work of this kind. The establishing of insurance funds in which the employees may, or in some cases must, insure themselves against sickness, accident, and old age, is also becoming more general.

There seems to be a growing tendency to take this welfare work out of the hands of the management and to place it in the hands of co-operative undertakings made up of employees, with possibly a small number of the firm's executives as advisors. This method is better adapted to American conditions than the paternalistic plans copied from European countries. The American workingman does not like to feel that he is being made the subject of charity. He is more or less suspicious of the management which introduces welfare work, because he sees in it a confession that wages are not sufficient to supply the worker with anything besides necessities. The co-operative undertaking, under guidance of the service department, seems to hold out the greatest promise of success. As an example of such a co-operative association, the following organization chart of an association founded in 1915 in a large department store on the Pacific coast is here given.



The aim of this association as stated in its constitution is "to increase efficiency, to add to social opportunities, to create and sustain a just and equitable relation between employer and employee."

This store, at one time known as having the largest labor turnover of any in the city, through its centralized employment service, its educational work, and through its co-operative association, has completely changed the spirit of the store. The labor turnover has constantly decreased during the last three years. Patrons who have traded at this store for years are enthusiastic about the change in the atmosphere. The clerks have caught the spirit of service, they have the interest of the concern at heart, and they have confidence in the fairness and reasonableness of their employers. They speak of the store as "their" store, so thoroughly has the new spirit done its work. The soulless organization in which the employees were members, scrapped if unsatisfactory, retained if profitable, has been changed into a family of workers, enthusiastically working for the success of the store, proud of their work as a ne-

cessary part of that success, and permeated with a spirit of mutual helpfulness which has made the store the most popular in the city.

The following chart gives a complete picture of the various functions of a service department. This chart was prepared by Dr. R. S. Quinby, Service Manager of the Hood Rubber Company:

ORGANIZATION AND FUNCTIONS OF SERVICE DEPARTMENT
SERVICE MANAGER

FUNCTION OF SERVICE DEPARTMENT TO CREATE AN EFFICIENT, HEALTHY, STABLE BODY OF WORKMEN				
EMPLOYMENT	HEALTH	SAFETY AND SANITATION	EDUCATION	GENERAL SERVICE
FUNCTIONS	FUNCTIONS	FUNCTIONS	FUNCTIONS	FUNCTIONS
1. Knowledge of Sources of Supply. 2. Knowledge of Factory Requirements. 3. Knowledge of Hours of Work. 4. Knowledge of Wages. 5. Knowledge of Work Environment. 6. Proper Selection of Applicants by— (a) Careful Interview. (b) Knowledge of Past Record. (c) Knowledge of Physical Condition. (d) Knowledge of Job Requirements. 7. General Instructions to New Employees. 8. Follow-up of Service Record. 9. Investigation of Absences. 10. Transfer and Promotions. 11. Investigation of Grievances. 12. Interview All Leaving Employees. (a) To Approve Discharge. (b) To Check Up Personnel's Reason for Leaving. (c) To Issue an "Important Message." 13. Keep adequate individual records. 14. Keep detailed reference records. 15. Forward State and Federal records. 16. To act as clearing house for general Employment Work.	1. Physical examination of applicants. 2. Physical examination of present employees. 3. Periodic re-examination of employees. 4. Periodic recommendation of employees exposed to industrial hazards. 5. Advise Employment Department on placement of employees. 6. Treatment of medical cases. 7. Treatment of surgical and accident cases. 8. Treatment of dental cases. 9. Treatment of ocular cases. 10. Prevention of a communicable disease and epidemics. 11. Co-operate with Employment Department and Safety Department in investigating absences. 12. Forwarding Employment Department with data concerning employee who are leaving as a result of ill health. 13. Keep adequate examination and treatment records. 14. Forward statistics pertaining to health.	1. Reduction of accidents by— (a) Education. (b) Sanitary conditions. (c) Following up of accidents and near accidents. 2. Forward factory inspection by— (a) Safety engineers. (b) Members Safety Committee. 3. Report all accidents to proper authorities. 4. Co-operate with Employment and Service Department in observing periods of disability. 5. Facilitate compensation payments. 6. Keep adequate records and statistics. 7. Supervision of— (a) Drinking water supply. (b) Ventilation. (c) Lighting. (d) Heating. (e) Tunnels and locker rooms. (f) Janitor and matron service. (g) General sanitary condition. 8. Elimination of industrial disease hazards. 9. General supervision of working conditions.	1. Bulletin board information. 2. General instructions to employees. 3. Circulation of current magazines. 4. Circulation of library books. 5. Instruction in— (a) Health. (b) Hygiene. (c) Care of teeth. (d) Care of eyes. 6. Factory publication. 7. Organization clubs. 8. Americanization campaign.	1. Supply store for employees (Granted sold at cost). 2. Farm (Vegetables raised and sold at cost). 3. Restaurant service. 4. Supervision of housing. 5. Supervision of recreational activities. 6. Supervision of compensated employees. 7. Supervision of Mental Health Association. 8. Supervision of theft activities. (Not under Service Organization)

Summary. Centralization and control of the working force makes for greater efficiency and secures a more stable body of workmen. Many functions which supplement the employment office are grouped with it under the service department.

The employment office is the most important of these service offices. The labor turnover, with its social and commercial losses, is diminished as a result of a study of its causes and the elimination of many of them. The employment office studies both applicant and boss, brings the two together, starts the workingman out and is always ready to aid him in making good. Transfers and supplementary education take the place of discharges.

The educational, health, and safety offices are also of great importance, while the welfare work aids greatly in stabilizing the working force by establishing pleasant surroundings at home and higher ideals in education and amusements. Co-operative welfare work usually leads to better results than paternalistic efforts.

REFERENCES

Same as preceding chapters. Additional references:

R. W. Kelly. *Hiring the Worker*. The Engineering Magazine Company.

A Thumbnail Sketch of the Filene Co-operative Association. Wm. Filene's Sons Company, Boston.

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American Academy of Political and Social Science, *Stabilizing Industrial Employment*. Annals of the Academy. May, 1917, Vol. LXXI, whole No. 160.

American Academy of Political and Social Science, *Personnel and Employment Problems in Industrial Management*. Annals of the Academy. Vol. LXV, No.

154. May, 1916. Editors: Meyer Bloomfield and Joseph H. Willits.

QUESTIONS FOR FURTHER STUDY

1. What are some of the remedies proposed for the waste in hiring and discharging employees?

References: *Waste in Hiring and Discharging Employees*. M. W. Alexander. Scientific American Supplement, No. 2041, February 13, 1915, pp. 102ff.

Kelly. Chapter XI.

Annals of the Academy, Vol. LXXI, Part I.

2. What is meant by a centralized employment department?

Reference: Annals of the Academy, Part II, Vol. LXV.

3. What are some of the advantages of giving the employees a voice in the management of the industry?

Reference: Annals of the Academy, Vol. LXXI, Part V.

4. Describe how a job is analyzed.

Reference: Kelly. Chapter V.

5. Are many firms aware of the need of special and general training for their employees? Describe some successful vestibule school.

References: Kelly. Chapter VII.

Duncan. Chapter XIV.

6. Visit some store or factory in your locality which maintains an employment office. Compare the blanks and records used in that office with those given by Kelly in Chapter X. Answer the following questions:

- (a) Which blanks given by Kelly are not found in the office visited?
- (b) Is there any good reason for their absence?
- (c) In what respect are the blanks used different from those given by Kelly?
- (d) Do you see any good reason for the difference? Could Kelly's blanks be used without any changes?

7. Draw up a list of all the functions that may be demanded of an employment manager.

Reference: Kelly. Chapter III.

Study the chart at the end of this chapter.

8. Draw up a similar list of the various kinds of welfare work that may be undertaken.

References: Jones. Chapter XV.

Parsons. *Office Organization and Management*. Chapters XII, XIII, XIV, XV, XVI.

Filene's Co-operative Association.

National Cash Register Company Employees Handbook.

TEST QUESTIONS

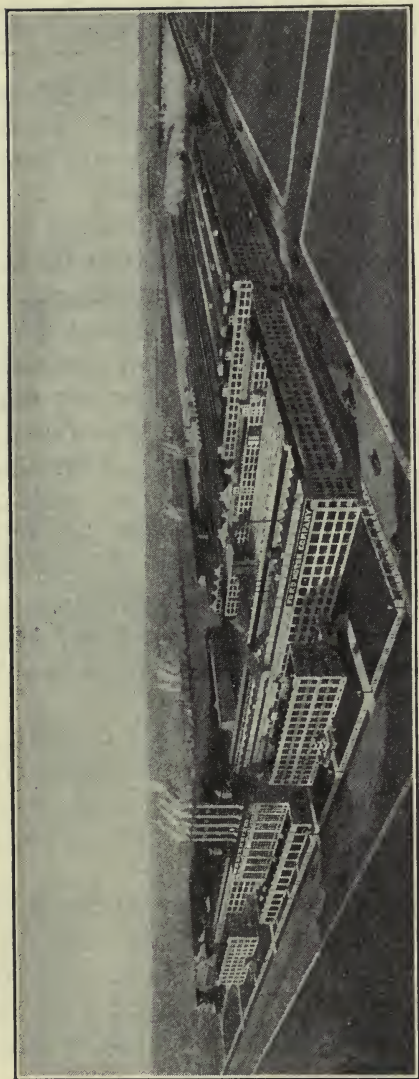
- 1. Why is centralization of hiring and discharging a desirable thing?
- 2. Why is a large labor turnover very expensive?
- 3. What is meant by a *job specification*? Explain the part played by this in the management of labor.
- 4. What is a vestibule school?
- 5. Can you see any good reason why an employment office should co-operate closely with the health office and the engineering office?

CHAPTER X

SELECTING THE SITE

The Location of the Plant Demands Careful Study. Since the manufacturer finds his profit in the margin between his cost and his selling price, he must endeavor to make his cost as small as possible, and his selling price as high as possible. The selling price is frequently quite beyond his control. The price at which his competitors are selling and the willingness of the consumer to pay a certain price and no more, frequently determine the price at which he must sell. The manufacturer is, therefore, very much interested in keeping his costs down. The location of his factory plays an important part in his cost of production. It is easy to see that it would not pay to build an automobile factory in the heart of New Mexico nor a salmon-packing plant in Detroit. But it takes careful study to determine whether Detroit, Chicago, or New York is the most desirable location for a lens-grinding plant. We must, therefore, analyze the factors in plant location.

Nearness to Raw Material. One of the reasons why it would be foolish to locate a salmon-packing plant in Chicago is because the raw material would have to be transported from Alaska or the Puget Sound



Ford Motor Company, Detroit, Michigan

region. This would be impracticable for two reasons. First of all, salmon is perishable. To be sure, it would be possible to ship the salmon in refrigerator cars, but that would be quite costly. In the second place, in shipping the whole salmon a lot of waste would be shipped. Not more than 60 per cent of the entire salmon is actually put in cans. To ship the other 40 per cent two thousand miles only to throw it away after arrival, is not reasonable.

This principle explains why lumber mills are located within easy reach of the timber lands. In the process of squaring and sawing, more than 40 per cent of the standing tree is cast aside as waste. Moreover, the boards and laths are more easily handled than the original logs. On the other hand it is better to locate the planing mill near the place where the lumber is to be used, for in transportation the finished lumber would be subject to damage and deterioration.

We may conclude, then, that it is safe to say that whenever the raw material is perishable, or contains a large percentage of waste, it is often best to locate the factory relatively near the source of raw material.

Why relatively near? Because other factors enter in to change our conclusion somewhat. It pays to ship logs tied together by chains into huge rafts from Norway to the sawmills of England, Germany, and Holland, because the cost of towing them across

with ocean-going tugs is much less than shipping the finished lumber they yield, the same distance. The relative cost of transportation must be taken into account.

Sometimes, as in the case of iron and steel, one car-load of raw material makes many carloads of finished goods. The finished goods, moreover, pay a higher freight rate. In such cases it is better to bring the raw material to the place where the finished product is to be sold.

Frequently it is possible to eliminate some of the waste in the raw material before starting it on its long journey. The concentrators in the Joplin district reduce the crude zinc ore sometimes as much as 80 per cent in weight before it is shipped to the distant smelters. Where more than one raw material is used the calculation becomes quite involved, but the principles here outlined apply nevertheless.

Another factor of importance is the quantity of raw material available. It obviously is not good business to build a lumber mill near a timber claim when the amount of timber is so small that it will be exhausted long before the plant is worn out.

Nearness to Market. Some industries can only be advantageously located near the market where the finished product is to be sold. The reason for this frequently lies in the perishable nature of the finished product and in the relatively higher freight rates.

We have seen that the planing mills are in this class. Often the industry derives a large income from the sale of by-products which do not bear transportation, or it may be that the products are produced largely to order, in which case nearness to the market is almost always necessary. The machine tool industry will be found near the place where the tools are used. It may also be that the industry depends upon the finished products of other industries. What are called "assembling" industries are usually located near the market. In that way they are sure of a supply of component parts and avoid double freight rates.

Available Labor Supply. Many sections of the country are industrially undeveloped, not because they lack the raw material or the markets, but because labor cannot be secured at a reasonable price. It may seem strange that labor can be so scarce in some sections, while it is plentiful in others, but it is a well-known fact that labor does not move freely; is not "mobile."

It takes a certain amount of courage to leave the home town and to strike out for a new place; it also takes money to travel. Few men have both the courage and the money. The result is that labor moves but slowly in the direction of higher wages and plentiful employment. The workingmen who do move are often single men who quickly grow restless and move on again after a short stay.

This moving labor is an expensive kind of labor for the employer. As we have seen in an earlier chapter, it takes time, effort, and money to train men for any occupation. Even where a man is skilled in a certain line of work he must be trained to fit into an organization so that he may perform his duties efficiently. A constantly changing labor force is expensive for that reason.

Sometimes an industry may be most advantageously located where there happens to be a plentiful supply of the kind of labor the industry needs. Many a town has become the center of an important industry because immigrants, skilled in certain trades, found it attractive for settlement. The pottery industry is a good example.

Other sections of the country will continue to be industrially backward because of the absence of a suitable labor supply. The silk industry in southern California and in Texas is suffering from this lack of labor, and will not for many years become a flourishing industry, notwithstanding the ideal climatic conditions.

The Power Factor. The presence of a source of cheap power for the driving of the machinery of the factory often outweighs many other considerations. Before the introduction of steam and electricity as motor powers, factories were located near rivers and waterfalls from which cheap power could be obtained.

The textile industry chose Massachusetts during the early years of the development of this American industry because abundant water power was available. To be sure, this necessitated the transportation of the raw cotton over a long distance, but good water connections reduced the seriousness of this disadvantage.

The fact that the principal market for the finished product was in the northern states also decided in favor of that location. It must be remembered that raw cotton does not represent as large an investment as the finished product. It was, therefore, cheaper to carry the raw cotton over a long distance and to expose it to danger of loss and damage than to place the factory near the cotton farm and to ship the cotton cloth. The labor factor also played a part, for even to-day the negro is not an ideal factory hand. He is lazy, shiftless, and does not enjoy steady work.

In a similar manner, many modern industries are located with reference to the supply of oil, gas, or coal. The expense involved in transporting these fuels and the fact that coal deteriorates in transportation are all arguments in favor of giving careful consideration to this factor. The more fuel a plant needs as compared with other materials, the more important this factor becomes.

Association with Other Industries Is Beneficial. It is interesting that once a city has been chosen by an industry, that locality becomes increasingly attrac-

tive to similar plants. Many towns have thus become the recognized centers of certain classes of industry. When we speak of autos, we unconsciously think of Detroit. Troy is associated with collars, shirts, and laundry equipment. Akron and auto tires are similarly connected.

Once a town has gained prominence in this way it becomes the logical place to locate factories of the same character. If one should be looking for a good location for a furniture factory, one would find that Grand Rapids is exceptionally well suited for that purpose. Here one may find a large and skilled labor supply. Young men grow up and learn the industry through contact with their friends and families, banks have experience in handling the credit paper that these factories have to sell, and are in a position to offer lower rates than a bank in some other city might ask, because the business was unknown there.

Every industry needs a large number of small parts and tools which it must buy outside. Such secondary industries cannot be profitably operated where the demand for their products is small.

Finally, the name of the town associated with the product has a certain advertising value. Other things equal, the Detroit-made automobile, will be preferred over a product of, say, Albuquerque, New Mexico.

Transportation. The rates charged by railway or water carrier very vitally affect the location of fac-

tories. Great rivalry exists, therefore, between cities, and each endeavors to secure a railway advantage over its rivals. A great responsibility rests upon the Government and especially upon the Interstate Commerce Commission, for a difference of a few cents in freight charges may mean the difference between prosperity and ruin for an industry, and retarded development for an entire city.

The transportation factor is not summed up in high or low freight rates. The type of service which is available is quite as important. A cheap service, subject to delays and irregularities, may be a greater handicap than high rates coupled with efficient service. The location and efficiency in the operation of the terminals also play an important part. Rates may be low and service excellent, but if the shipment is held up in the switching yard because of congestion, or if the freight station is poorly located, so that long delay in haulage becomes unavoidable, these unfavorable factors may destroy the advantage of low rates and good line service. Few business men realize how they are, to some extent, to blame for the congestion of our freight yards by their failure to unload the cars as soon as they arrive.

The multiplicity of railway terminals and the lack of proper co-ordination of railway facilities, both with each other and with the terminals of water carriers, is one of the most glaring causes of transportation inefficiency in this country. The centralized control

of the United States Railway Administration has improved this situation, but it is not certain that these improvements will remain effective should the railways pass again into private hands.

Whether to Locate in City or Country. Once the most advantageous location has been determined, it is necessary to decide whether the plant shall be built in the country or in the city.

The country location offers many attractions; land is cheaper, and it is possible to have a spur connect the factory with the railroad, thereby saving great expense in drayage. Wages are usually lower in the country and small town than in the city.

But certain disadvantages must not be overlooked. In fact, a small plant will often find these disadvantages insurmountable. The small towns almost always lack the labor supply. Labor is not easily imported, especially not if the factory is the only one of its kind in that locality. A "one-factory town" is not popular with the workers. Imported labor may not be content to live away from the amusements of the city. In order to keep the workman satisfied and to give them wholesome recreation, large outlays may be necessary. One company spends as much as \$70,000 yearly in this way.

Another source of expense is the higher insurance rates which must be paid in country districts with inadequate fire protection. It may also be that the freight rates are higher to the small town than to the

city. It is not difficult to see why this may well be the case. The long-distance freight may pass through the town on its way to the city as part of a limited freight train, and return from the city by a local train. Expenses of handling a few cars at a small station are relatively higher than the expense of handling that same number in a larger switching yard. The distance from repair shops and subsidiary industries is also a disadvantage. All these drawbacks of the country location diminish in importance as the factory increases in size and becomes a more self-sufficient undertaking.

For the moderately sized factory the city may be the logical place to locate. The disadvantages of the city are, nevertheless, quite apparent. Because of the expensiveness of the sites, a factory must build perpendicularly; this means an expensive structure. It means poor light and ventilation, especially since others on adjoining sites are also forced to build high. It also means expensive operation. As we shall see later, transportation of goods through the factory slows down to a marked degree when goods must be lifted from one floor to another. The whole factory is, therefore, slowed down to a less efficient rate of production. If we add to this the unfavorable living conditions found in the larger cities, which lower the vitality and efficiency of the workers, then we see clearly that the matter of choosing the site is not easily disposed of.

Inducements Offered by Cities. When a city grows, the land values increase, and stores and restaurants and many other kinds of business enterprises make more money. Hence business men are vitally interested in aiding the growth of the city in which they are located. One way of bringing about this growth is to attract factories. Factories will draw a population of workers and will increase activities in the banking and building fields.

Many plans are used by ambitious business men to induce manufacturers to locate in their town. Free sites may be offered, or free use of site or building, with option to buy at the end of a certain period. In other cases free fuel, free power, exemption from taxation, or even a cash bonus may be held out to persuade the manufacturer to decide in favor of the town.

Sometimes methods are devised to aid in the financing of the enterprise. A loan corporation may be formed by the business men and banks which will lend money at a low rate to new enterprises. The town may organize a financial company which buys stock in new industrial undertakings; or a credit fund may be established which endorses the notes of new concerns and thereby makes discounting at the regular banks possible. These schemes only too often attract industries which should not be located in those communities, or which are launched by dishonest and unscrupulous men. The wrecks of such

artificially supported enterprises may be seen in many an American town.

One of the most interesting and businesslike methods of attracting new industries is the *factory incubator*. Toledo and many other enterprising cities have a number of large factory buildings of the newest type of construction and completely equipped with the necessary power and light. New industries may here rent factory space, a whole floor or a part of a floor. The rental includes the use of the elevator, the switching facilities, and sometimes also of the general employment office maintained in the building. Power, heat, and light are usually sold by meter rates. In this way a new enterprise may start operation without being forced to tie up a large share of its funds in capital investments. Once the success of the undertaking has been assured, an independent building may be built.

Deciding upon the Site. After the decision has been made in regard to the town or the section of the country in which the factory shall be located, the exact site must be selected. This again opens up difficult problems. Many real estate firms will present their offerings and each will have a very good reason why its factory site is better than all others in the city. The manufacturer must proceed cautiously, for a factory once built cannot be moved and frequently cannot be sold to advantage.

The principal question is not so much the price of the land as the facilities which the site offers. In case much of the raw material needed can be moved cheaply by water, a water frontage on a canal or a lake accessible to ships carrying this material is worth a great deal. It will mean a large yearly saving in drayage. The distance to the nearest railroad station or the possibility of having a spur installed by means of which the freight cars can be brought right into the factory, all play a part. If the site is near a large city where a "switching district" has been established, it is highly important to know whether the site is inside or outside this "switching district." If outside, a higher rate will have to be paid to the railroad for handling the cars, and much delay will result when cars are to be transferred from one line to another. The insurance rates, the nearness of residences which might lead to complaints in regard to the smoke or odor created by the factory, the street car connections with the workingmen's residential district, and the possibilities for future enlargements must all be considered when selecting the site.

Wholesale and Retail Locations. The locating of retail stores or wholesale houses must also be made the subject of careful study. In our larger cities the wholesale and retail districts are usually quite distinct. The wholesale district is, as a rule, located with due regard to the location of water and railroad

terminals. Such sites are frequently undesirable for retail or residential districts because of the noise and the large amount of trucking which prevents the development of other kinds of traffic, slows down the street car service, and keeps the pavements in poor shape.

Around these wholesale districts many subsidiary concerns spring up. Here we find banks, freight-forwarders, steamship, railroad, and insurance offices; all representing necessary functions in the passing of goods from manufacturer to wholesaler and from wholesaler to retailer.

There are usually two different types of retail districts. One or more main shopping sections located near the center of the city and close to the wholesale district, and a large number of small retail centers located conveniently to the principal residential districts.

In New York City the various districts are quite easily recognized. The shipping and financial district occupies lower Manhattan. Then traveling along the island, one passes through the wholesale district and finally into the main shopping centers on Fifth Avenue and Broadway. After the Central Park region is reached the retail district gradually changes into a residential section. It is interesting that in a growing city these districts always encroach upon each other. As the wholesale district grows it

drives out the retail stores, while the residential sections carry on a losing struggle against invasion by the retail stores.

The Retail Store Location. The first step in determining where to locate a retail store is to analyze the market for the products to be handled, and to decide whether conditions of demand and competition will allow a new store to enter the field. The methods which may be followed to ascertain this will be described in the chapter on selling.

Once the city or town has been chosen, it remains to decide what location shall be picked within the town. Many stores are located in a somewhat haphazard fashion. Large chain stores, such as the Woolworth ten-cent stores and the cigar stores of the United Cigar Stores Company, are located only after a careful study has been made of all available sites.

Certain definite principles must here be borne in mind:

1. It is usually advantageous to locate near other stores of the same kind. At first thought this may seem unreasonable since the new store would then be opened in the midst of keen competition, but experience shows that shoppers when in search of an article visit the section of the retail district where stores are found which handle it. Stores outside this section must make special outlays in advertising to attract that trade. Larger cities have their furniture stores, automobile salesrooms, and dry goods

stores each grouped in fairly well-defined sections of the retail district.

2. Complementary articles are best grouped together. A new suit necessitates a new hat and frequently new shoes. Where such articles are sold in different stores they not uncommonly seek the same street and the same side of the street.
3. The sides of the street become specialized. As stores which deal principally or solely in articles that appeal to women group themselves together, they will gradually force the men's stores to another block, or another side of the street. Any women's store located on the men's side will find it advantageous to change its location, since women do not like to pass a long line of cigar stores, men's furnishing stores, pool rooms, and saloons when on a shopping trip. Although this kind of specialization is not always so clearly noticeable, the tendency in that respect may be observed in most retail centers.
4. Anything that makes walking along the sidewalks uncomfortable will interfere with business. Slippery sidewalks, walks that are in bad repair, iron-covered cellar openings, all drive customers away, for they will either avoid that sidewalk altogether and choose the other side of the street, or they will walk along the outer edge, watching their steps instead of looking at the window display. In the southern states, the side of the street which is all day long exposed to the hot sun is not popular, a fact which even a liberal use of awnings and balconies cannot entirely offset. Dangerous crossings will cause cus-

tomers to avoid the sidewalk; blank walls which contrast with the gay and lighted windows at the other side of the street will have the same effect, for people are like moths; they go where the bright light shines.

5. Though a crowded street is more likely to be a good retail street than a deserted one, the number of passers by means little in itself; they must be in the buying mood. The corners near the elevated stations in Chicago are highly desirable because many persons pass there every hour of the day. But such locations are only suitable for certain kinds of trade. People about to take a subway or elevated train are usually not in a buying mood. They are in a hurry to reach their work or in a hurry to get home. Only articles which are bought on sudden impulse, or as a last thought before taking a car are logically suited for such a location. Candy stores, flower booths, cigar stores, and drug stores are especially adapted.

A store which expects to sell goods to men must locate where the largest number of men of the social class to whom the articles appeal pass at the right time of the day. A street frequented by working people on Saturday afternoon and evening is a better street to locate a store of cheap jewelry and working clothes than a street where a large number of workmen pass on their way to work.

A careful study of the various factors which influence the value of locations may sometimes lead to

surprising results. Many sites are in bad repute only because the right kind of store has not located there, and may consequently be obtained at a relatively low figure, by the owner of a store for which that location is admirably suited.

Summary. Before locating a business establishment a careful study should be made of the site. In the case of a factory, nearness to raw materials, to labor, power, and to the selling market must all be considered. For some kinds of factories a country location may be desirable. The small plant depending upon other industries and not able to attract its labor readily does better to locate in the city.

Wholesale and retail establishments must also consider their locations carefully. The wholesaler will locate advantageously near other wholesale concerns which usually are grouped around the rail and water terminals where banks, express offices, and other subsidiary concerns are also congregated.

The retail store must be located principally with regard to the habits of the kind of public it hopes to attract. All factors which might enter in to drive the desired trade away from the chosen location must be carefully analyzed.

REFERENCES

The same as those of the preceding chapters. Additional reference:

J. R. Smith. *Industrial and Commercial Geography*.
Henry Holt and Company.

QUESTIONS FOR FURTHER STUDY

1. Give some examples of industries in your home state which are located near the source of raw material, and consider whether it would be desirable to move these industries closer to the market of finished goods.

2. Study an assembling industry in your city or town and find out where the products which are combined in the finished article come from.

An interesting way of presenting the situation is to take a large map of the United States and to connect the location of such an industry with the sources of supply by means of lines drawn in red ink. Then find out what the farthest points are to which its finished product is shipped and connect them with a set of lines which completely encircle the city. This irregularly shaped area is the market territory.

3. Can you see any danger in locating a factory near an oil well just because this will give you cheap power and to ignore many other important factors? Can you discover any reason for the fact that the carborundum plants are grouped around Niagara Falls; that many wood-pulp mills are operated in Vermont or Massachusetts; that Pittsburgh is a center of the iron industry?

In order to answer these questions you must look up in some encyclopedia, magazine article, or government report the facts about these industries so that you may understand what raw materials are used and what other requirements the location must satisfy.

Reference: Smith. Chapters X, XI.

TEST QUESTIONS

1. How would you decide whether your town is a good place to locate a furniture factory? Give a complete statement of all the information that you will need in order to answer that question intelligently.
2. What information would you need in order to answer the question whether it is better to locate in the city or in the country?
3. What is your city doing to attract new industries?
4. How would you determine the best location in your town for a very expensive restaurant?

CHAPTER XI

PLANNING THE BUILDING

A Poor Building Means High Cost. It costs money to build a factory and to keep it in repair, and it costs money to operate it. The object of all management is to obtain the largest results with these outlays. That means that once the concern has invested in equipment the most complete use must be made of it during its lifetime. Every hour of idle time, every square foot of idle space, means money wasted. This principle holds true in factory, store-room, office, or retail store.

The Factory Layout. We shall first study the factory. Before deciding how to build a factory or how to arrange the various machines in respect to each other, it is necessary to form a very clear picture of what the factory is supposed to do, what processes will have to be housed in the building, what the relation is of these processes to each other. It is necessary, therefore, as a first step, to analyze the work.

Once we know the processes and the order in which they follow each other, we can *lay out* the factory on paper. The building becomes then little more than a shell, a roof to keep off the rain. This way of planning a factory is quite different from construct-

ing a building first and then trying to fit machinery inside. This last method often leads to very poor results.

The Various Types of Factories. Some factories are very simple indeed. Take a planing mill. The rough boards as they are received from the lumber mill enter at one end of the plant and the planed boards come out at the other end. This type of manufacturing process has been called *simple sequence*. There are no by-products except a small amount of waste, neither does any combination of materials take place.

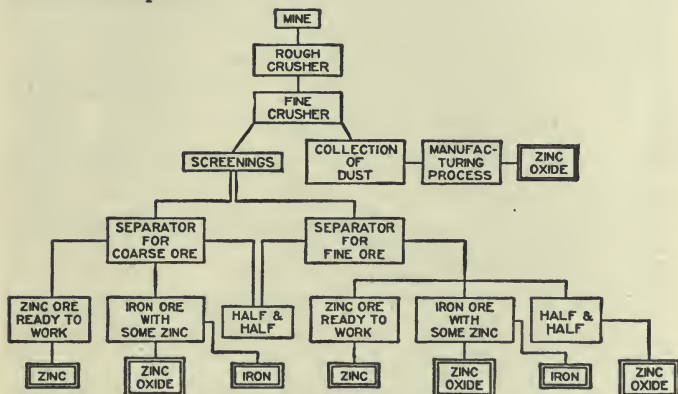
The processes are a little more involved in the case of a factory which takes the raw products of nature and splits them up into their component parts. A flour mill does this. The wheat is graded and cleaned, after which poor wheat and trash are separated from the good wheat. The wheat is then ground and the chaff separated from the flour.

Much more involved is a smelter which takes the ore as it comes from the mine and by mechanical and chemical processes divides it up into some score of different products. A packing plant is another example: the cow or pig goes in at one end and from the other end of the factory different cuts of meat and a long list of by-products—glue, fertilizer, soap, and buttons—pass on to the consumer.

Such manufacturing processes have been called *analytic*. They analyze the raw material, *i. e.*, divide it into its component parts. A chart of the processes

in such a factory looks very much like a pyramid. One simple raw product stands at the top and an increasing number of finished and by-products develop as the bottom is approached.

Such a chart of processes is called a *flow sheet*. Here is an example:



FLOW SHEET OF THE FRANKLIN MINE

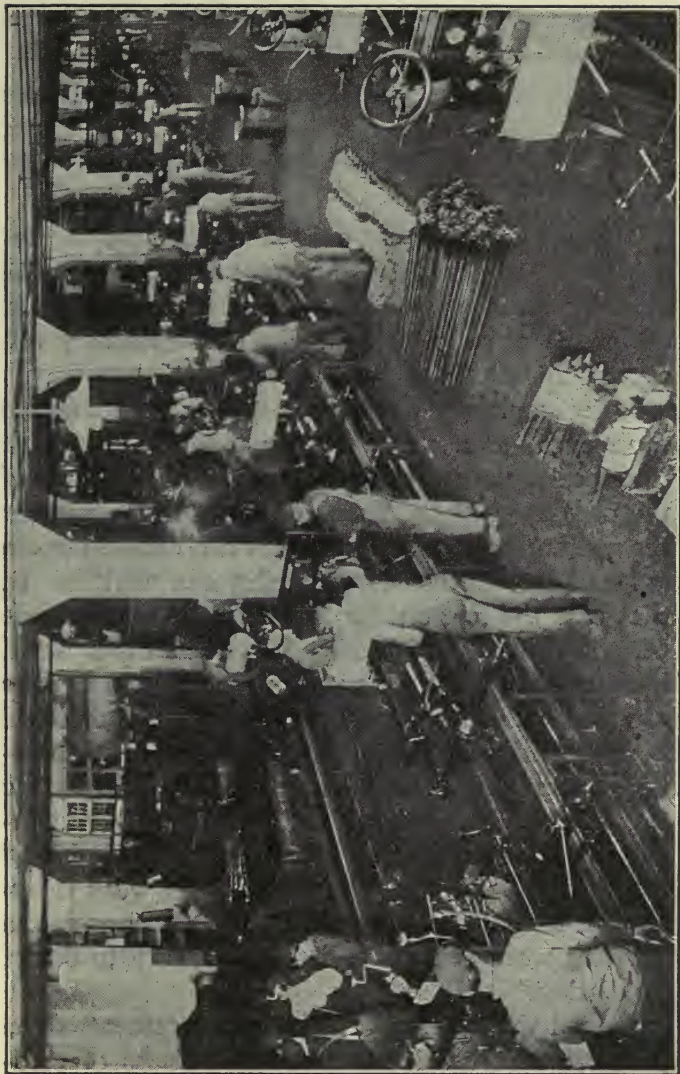
This is a very simple flow sheet, for the ore produced by this mine consists almost wholly of zinc and iron ore, which are easily separated after being crushed and do not give rise to many by-products. A flow sheet of another smelter, the Balbach Smelting Works in Newark, New Jersey, shows a much more involved situation. Here ore from various sources is smelted and refined, resulting in an output of arsenic, antimony, lead, lead-oxide, silver, and gold.

The Assembling Industries. In an assembling industry the flow sheet looks quite different, looks, in fact, like an inverted triangle. At the top of the sheet a large number of products, usually the finished or partly finished products of other industries, appear, and at the bottom of the sheet is the finished product of which they have become a part. This assembling may take place in one assembling room in the factory, the component parts being brought to this room. This has been called *stationary assembling*. In other factories another method called *progressive assembling* is found.

The Ford process of assembling is called progressive assembling because the chassis travels upon a rail and is carried along at a constant rate of speed from one production center to the next—progresses from bare chassis to finished car.

The Production Centers. The object of such an analysis of processes is to determine clearly the character and order of the various processes. Each process through which the goods pass will necessitate some kind of machinery and some floor space where the processes are to take place. The factory may, therefore, be subdivided into a number of smaller factories, as it were, in each of which one process is housed. Such small units are called *production centers*. We are now ready to determine the following questions:

1. How much space must be allowed for each center?



Assembling Line, Ford Motor Company

2. How must these centers be arranged to secure efficient operation?
3. How must the products pass from one center to another?

The first question can only be answered by someone experienced in the industry or familiar with the kind of machinery which constitutes the production center. The firm which supplies this machinery will frequently be able to give this information.

It is extremely important that the productive capacity of each center be properly adjusted with reference to that of all others. Take the example of the flow sheet of the Franklin mine. Suppose that the fine crusher is so large that it can handle the ore twice as fast as the coarse crusher can work it. In that case the fine crusher will be idle half the time while waiting for material. If, on the other hand, it cannot work the ore as fast as the coarse crusher can feed it then there will be a piling up of material at the fine crusher. Production centers must, therefore, be arranged so as to permit the material to flow through steadily without congestion or without involving idle machinery. From the point of view of management this uninterrupted flow of work is important in that it sets a pace for the workmen in the different work centers, and makes it easy to detect "soldiering."

A good way to study the best arrangement of the production centers is to cut small pieces of card-

board, each representing a production center. These pieces may bear a picture of the machine or bench and should be carefully cut to scale. Many managers have every machine and workbench represented in this way upon a floor plan of the factory. By moving these pieces about upon the floor plan, the different possible combinations may be tried out until the most efficient one is discovered. The machines themselves are not touched until the layout has been determined upon. Sometimes cards of a different color are placed upon the plan to reserve space for machines to be purchased in the future.

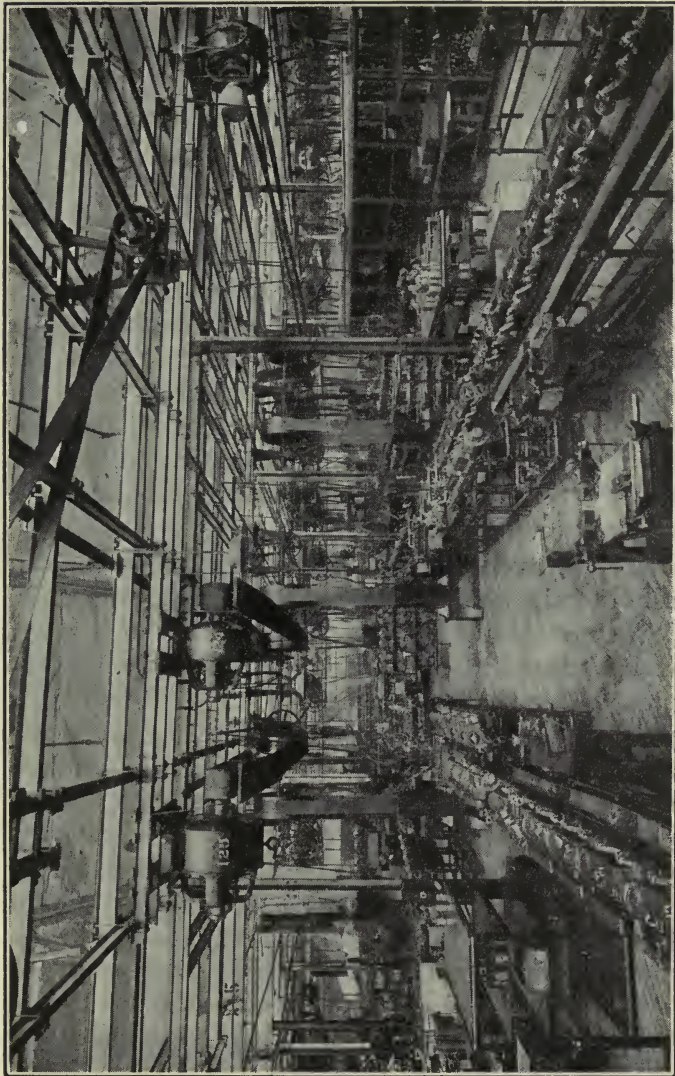
Transportation in the Factory. A very important question is how to connect these various production centers. Theoretically, of course, the goods must pass with a minimum delay and a minimum cost from one production center to another. This involves some kind of transportation service. In an analytical industry this problem is usually not very difficult. Most of the material *flows*. In a flour mill the wheat is started at the top of the mill, and flows through the various machines by gravity. If one trip through the mill is not sufficient, it may be started again from the top. A belt with small buckets lifts the material to the top of the building. Where horizontal transportation is needed, "screw conveyors" or "horizontal belt conveyors" may be used. It is a simple matter to regulate the speed of all these conveyors so that no congestion occurs any-

where along the line, and the whole journey may be completed without necessitating rehandling.

In an assembling industry the transportation problem is more difficult. It would not do to hoist the parts of a motor car to the top of the building and to let them slide down by gravity. The component parts are of varying sizes and weights, and usually require a great deal of rehandling. Here trucks, or in case of very heavy articles, cranes may be indispensable, though in some few machine factories belt conveyors are used with success.

When trucks are used the problem of moving them from one floor to another presents itself. Elevators are always expensive, are likely to get out of order, and are time consuming. It has been calculated that an elevator will rise fifteen feet, or one story, in the same time that a truck travels one hundred feet on the level; two stories while the truck travels one hundred and fifty feet; and three stories while the truck moves two hundred feet.

Frequent traveling between floors is, therefore, uneconomical. In many factories elevators have been completely eliminated, and inclined roads allow the truck to travel from floor to floor. These trucks should be so built that all material may be moved on or off the truck with the minimum amount of lifting. That saves labor and time. Sometimes this may mean a low truck and at other times it may mean a high truck. This depends upon how the material is



Motor Department, Ford Motor Company

needed at the various machines. Too little attention is paid to this feature and highly paid, skilled workmen spend a good part of their time lifting the articles from or onto the truck.

In order to limit the investment in trucks to the lowest figure they should not be allowed to stand idle. Some factories, anxious to secure maximum efficiency, place the care of trucks in the hands of a separate department which operates the trucks like a railroad system. In every production center a time-table is hung showing when trucks will pass by. At the Willys-Overland factory at Toledo, and at many other automobile factories, such regular truck service is maintained.

Usually every production center will have its own set of trucks which are loaded as the work progresses, to be picked up by the truck train. Such truck trains are pulled by a small electric or gasoline engine. This type of equipment is obviously only possible when trucks are used on a large scale and are constantly on the move. Where trucks are used only occasionally, hand trucks of moderate size are to be preferred. Trucks are always relatively expensive. A good way to have all the advantages of trucks, but to avoid the expense of maintaining a large number of idle trucks, is to have at each production center loading platforms where the finished articles are accumulated. As soon as the platform is loaded a small elevator truck is shoved under the

platform, a lever lifts the platform off the ground, and it can then be wheeled away to be deposited elsewhere. This is a common method of saving expense.

Large department stores and wholesale firms succeed in making great savings in outside delivery expense by the use of trailers. These are trucks without engines, which are inexpensive, and when loaded are picked up by the tractor. The most expensive part of the trucks, the power unit, is thereby kept at work continually and so is the driver, who usually receives fairly high wages.

Other Considerations. The internal arrangement of the plant is, therefore, determined upon the basis of maximum efficiency in operation. Frequently, however, it is necessary to look further ahead and to lay out the plans with due regard to future enlargements. Proper planning of internal arrangements will make it possible for the architect to place the heaviest construction where it is needed, to secure saving where possible, and to provide for ample light wherever this is essential.

After the production centers have been properly laid out it is necessary to find the most efficient location for tool rooms, stock rooms, power plants, offices, drafting rooms, elevator shafts, fire escapes, service stations, and a multitude of subsidiaries of a manufacturing establishment. In locating them, considerations similar to those which determine the location of production centers serve as guides.

The Building Itself. Great changes have recently been made in factory construction, the old frame building is universally considered out of date. It is cheap to build, but presents great danger to life and property from fire, and is not desirable for large plants nor for buildings of more than two stories. The slow-burning type of building is merely of heavier construction with a few changes in details which offer a certain degree of protection against fire. Many modern buildings are built of steel frame, while the walls built of tile or brick do not really carry the building. Such structures are very expensive but are often desirable where heavy beams are needed to support machinery, cranes, or shafts. A fourth type of construction, the re-enforced concrete building, is becoming more and more common. The advantages of these last two methods of construction are the virtual elimination of fire danger, the generous free space in the walls, which allows for large windows, thereby insuring light and air; and the relatively low upkeep.

Where land is cheap, one-story buildings may frequently prove most efficient. They are cheap and safe, afford unusually good opportunity for lighting, especially by means of the saw-tooth roof, and they allow horizontal and straight line transportation between production centers.

Planning the Retail Store. The retail store faces problems essentially of the same character as the

factory. Here, too, it is necessary to make the most complete use of the available floor space. As a matter of fact, the question is of even greater weight in the case of a store, since floor space is usually more expensive there than in a factory located in the outskirts of the city.

The store should, therefore, be planned to make each square foot of floor space as effective as possible. The store manager faces a difficult problem. He must study the desires and habits of his customers and must take into account the effect of his arrangement of the store upon its general appearance and attractiveness.

Customers, as a rule, dislike to climb stairs or to crowd into elevators. They especially dislike going down below the street level. The store manager must, therefore, lay out his store so that goods to which he is anxious to attract attention are placed where buyers will go naturally. The less desirable places he must then utilize for articles which have a special attraction for customers or which are never bought in a hurry.

The bargain basement is a logical outcome of this consideration. People hunting bargains do not mind going to the basement for them. Those who are out to buy an expensive rug or a dining room set—a purchase one makes hardly ever more often than once in a lifetime—are quite willing to go to the fourth and fifth story to find them.

It is different with men's clothing. Men do not like to shop. They consider the time spent in shopping wasted time, and they resent it when they are sent from one end of the store to another or have to travel to some other floor to find what they seek. The same thing is true of women looking for such items as gloves, laces, ribbons, and buttons. If they have to go to much trouble to get to the proper counter, they will frequently rather go to some other store. With hats, suits, and dresses it is different. Women will spend whole days comparing models and prices before they make their selection, and they do not mind a trip in the elevator to arrive at the department where the goods are sold.

Another important factor which determines the location of departments in a large store, is the fact that some goods suggest the need of other goods. It is always advisable to display such complementary goods together. Silver cigarette cases may be displayed in the silver goods department, but it would be a mistake not to display them also near the place where the cigars and cigarettes are sold. These in turn are most advantageously located near the men's wearing apparel; in that part of the store where men are most likely to go.

Specialties and notions for which the demand has to be cultivated, such as a new model of some commonly used article, often are displayed to advantage not in the department in which they logically belong,

but where the largest number of customers to which the article appeals pass by. For the same reason it is wise to place articles for which a customer will walk across the store, at the farther end, thereby affording other goods the opportunity to catch his eye as he passes.

The Retail Building. The retail store building must satisfy many of the requirements demanded of a factory building and many others in addition. Good light, heat, ventilation, properly placed service departments, elevators, and stairs, protection against fire—these are necessary factors in both types of buildings. But the retail store must not only be a good place in which to work—it must be made attractive to the customer. A dark store repels customers and is a poor place to display and sell anything that needs to be inspected. By the use of a light finish, the interior of a building may be made cheerful and the amount of reflected light increased.

The front of the building must receive careful attention. It must always be remembered that the frontage was paid for and that the most effective use must be made of the display possibilities of this frontage. Anything which interferes with this means a loss to the concern. Massive columns, unnecessarily large entrances, and blank walls all mean frontage wasted. For the same reason everything should be done to induce the crowd to pass by the windows.

Comfortable, well-kept, and unobstructed sidewalks, safe and clear crossings, generous awnings which protect against rain and sun, and well-lighted window displays are all potent factors in attracting trade. The modern store building, save for ornamental features, is being built along lines not so very different from those of the modern factory plants.

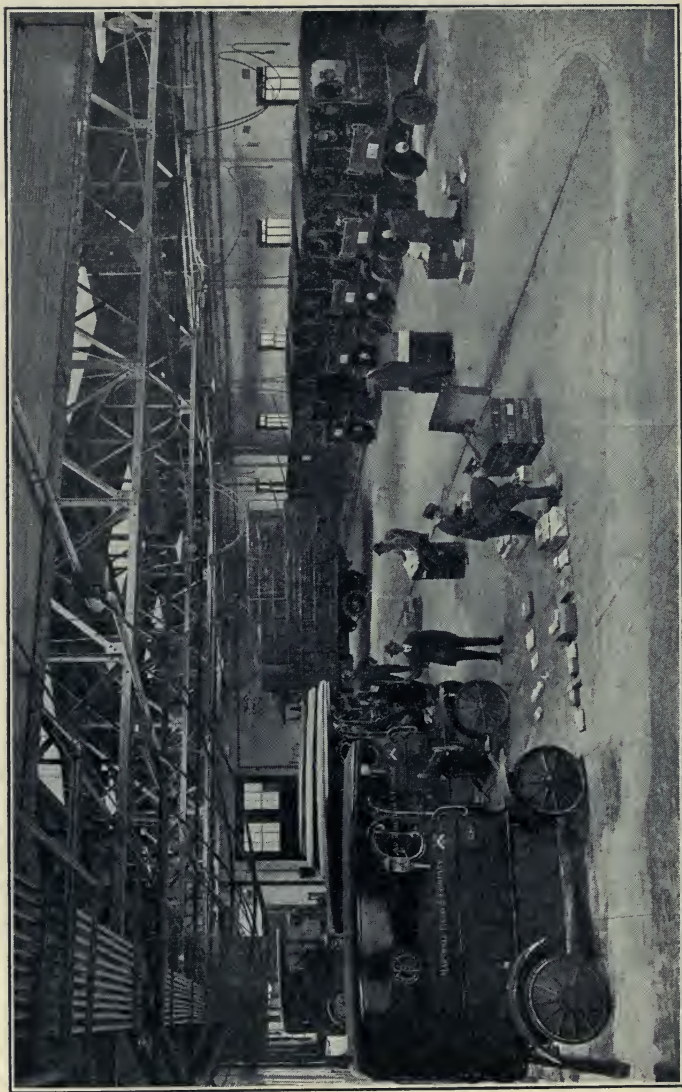
There is disagreement in regard to whether elevators, inclined walks, or moving staircases are the best adapted to the use of stores. It seems that a good, spacious elevator is to be preferred. The arguments against the other means of traveling are that an inclined walk is too fatiguing for customers, and the moving staircase requires a certain amount of skill of its passengers. Women frequently dislike them for fear that they may not move gracefully when boarding or leaving the stairs.

Where elevators are used, prompt service is essential. In large stores this is obtained by the use of a dispatcher who at the same time acts as a store guide. By the use of local and express elevators, otherwise unpopular floors may be opened up. Especially when the top floor is used for a restaurant, a special elevator for its patrons is indispensable. Some large department stores divide their elevators into large groups, one for *up* and the other for *down* service. This makes a quick return trip possible and lessens the likelihood of congestion.

The Receiving and Shipping Rooms. The location of the receiving and shipping rooms is a much more difficult problem to solve in the retail store than in the factory. In the case of the factory the position of the railroad siding, or of the best-paved road are the determining factors. The retail store usually faces the choice between the use of some back alley, which is easily blocked and used for many other purposes, or the sacrifice of a part of the expensive frontage and the obstruction of the sidewalk. It is a fact that even large stores, carefully planned in every other respect, have failed to give due attention to receiving and shipping. This usually results in a poorly kept storeroom, which again results in high costs and unexpected losses.

Not a few large department stores have taken heroic measures to solve this problem, and have provided for a wide alley leading through the center of the building with outlets at the least desirable frontage. In Chicago and New York examples may be seen in the largest and best-known department stores.

Planning the Office. Few offices are carefully laid out, and as a result much unnecessary walking around slows down the work of the office. To lay out an office properly the same method may be followed as is used in laying out a factory. The desks are production centers, and should be arranged in such order that documents and papers may travel upon



Delivery Trucks, Marshall, Field and Company

their customary journeys along straight lines with a minimum of delay and congestion.

As far as working conditions are concerned more even than in a factory, good light is essential. It is also necessary to eliminate all unnecessary noise. Wooden floors and noisy office machinery should be avoided. Where appliances such as adding machines, typewriters, comptometers, and addressographs are needed, it is best to place them all in a special room and to separate this room from the executive and accounting offices by means of partitions. Glass partitions are to be preferred to solid ones since they close out dust and noise but do not interfere with the light. It is also conducive to better work if no office, whether occupied by executives or stenographers, has too much privacy. Not many employees like to be caught napping. An unobstructed view of the entire office force, moreover, makes an impression of great activity upon visitors and looks cheerful and hospitable.

Summary. We have studied the method of planning a building. First, the processes are analyzed in production centers. Various types of factories are here discovered to exist: simple sequence, analytical, and assembling. The next problem is to correlate these centers, to place them in their proper location, and to connect them by means of the most efficient transportation methods. The choice between different conveyors and trucks must here be made. The

building itself is a mere shell, and must be so planned as to cause a minimum of interference with the ideal layout. Light, heat, and air are the factors which must determine in the long run the success of a building—also fire protection. The retail store faces similar problems, but the customers must here be taken into account. The location of departments and their relation to each other, the use of floors and basements, the use of window space, of elevators, and other means of conveyance must all be made the subject of careful study and analysis. Nothing must be left to chance and guess work. The building must be so constructed that it will be attractive to customers, a good place in which to work, and that it affords the maximum opportunity for sales display. A difficult problem is the location of the receiving and shipping rooms, especially where a store occupies an expensive site, for in that case all frontages may be of great value.

REFERENCES

Same as preceding chapters. Additional reference:

P. H. Nystrom. *The Economics of Retailing*. The Ronald Press Company.

QUESTIONS FOR FURTHER STUDY

1. What is meant by *non-productive departments* in a store?

Reference: Nystrom. Chapter X.

2. Where would you locate the washrooms and clothes closets in a factory?

3. Visit some factory or store and draw a floorplan. Is everything arranged in the most efficient way or can you suggest some possible changes?

4. What considerations should be kept in mind when planning the arrangement of the office?

References: Parsons. Chapter II.

Schulze. Chapter V.

TEST QUESTIONS

1. What is meant by *progressive assembling*?

2. Explain why the internal arrangement of the plant or store is of vital importance.

3. Where would you locate the shipping room in a factory built in the country, and where would you locate the same room in a store in the center of a large city?

CHAPTER XII

PURCHASING

Careful Buying Is Essential to Successful Selling. The true importance of buying is not infrequently overlooked in fairly well-managed business concerns, and attention is devoted almost exclusively to production and selling. The type of business where buying is always looked upon as important is the wholesale and retail business. Here the relation between buying and selling is clearly evident. In a manufacturing concern buying is frequently looked upon as a relatively simple matter of small importance. Yet there, too, intelligent buying requires special knowledge, while accurate information regarding the processes of production, and the market for the finished goods, is absolutely essential.

Three Classes of Purchases. There are three classes of articles which a factory needs to purchase. The permanent equipment, such as large machines, trucks, and cars forms one class; the raw material and small tools form a second group; while office supplies and equipment form a third. At most large plants where an effective purchasing department has been established, this office is in charge of the buying of these three classes of goods. In other plants the

machinery is purchased by the engineering department, while the other requirements are supplied by the respective departments. Centralization of purchasing in one office is always to be preferred. Proper buying is a specialized occupation quite as intricate as the work of a salesman. No engineer would undertake to sell his product himself, no more should he undertake the buying of the equipment and raw materials needed in his shop; moreover, centralization makes for greater standardization. Though everything may be carried to extremes, standardization is a measure leading to economy and efficiency.

That standardization makes for economy was made unmistakably clear in the Great War. Before motor transport equipment was standardized, as many as thirty different sets of repair parts had to be kept at the repair shops. Every step towards complete standardization means a reduction in the money tied up in such parts. In an office, standardization is also desirable, even in such details as the shape and size of letter paper, the color of the typewriter ribbon, and the size and color of desk pads. There are cases, however, where standardization would not contribute to efficiency. In a factory where goods of various sizes and weights must be transported, it would be wasteful to have all trucks built as heavy and strong as the heaviest and most bulky articles would require.

The Requisition. The purchasing department does buying only on receipt of a "requisition order." In the case of expensive machinery, or new or unusual equipment, such orders will, as a rule, only be honored if signed, not only by the head of the department where the order originates, but also by some higher executive officer. In the National Cash Register Company, four signatures are needed on every requisition for equipment, the cost of which exceeds \$100; namely, the signature of the head of the department, of the supervisor, of the head of the division, and of the chief engineer.

Office supplies, raw material, and parts are also ordered upon requisition, but this is more a matter of routine. The office requisition reaches the purchasing agent from the head of the department concerned. The requisition for raw material is made out by the "store clerk" who is in charge of the raw material storeroom, and who makes requisitions as soon as the need arises. Similar requisitions originate in the stock room where parts and partly finished goods are stored.

A typical store or stock department requisition is given below:

..... Order No.....
 191.....

Quantity	Price
Description	

Quantity in Stock	Quantity Due on Previous Orders	Total Amount Used Past Six Months	O. K. Checker O. K. Price Clerk

Remarks

Buyer's Instructions: All quotations secured to be entered on back of this copy and signed.

The form given above is used for ordinary routine requisitions. The forms for articles not carried in stock can be made substantially the same, except that some additional information would be required, and there would be provision at the bottom for the signature of the proper officials who are to pass upon such unusual orders.

Orders are numbered consecutively. Moreover, each kind of article will have its own number by which it is known in the stock room, accounting, fac-

tory, and purchasing department records. Screw bolts, set screws, and nuts may, therefore, be known as 135, 375, and 943, respectively, and each order will receive its own number which will be attached to the item number. The first order will be 01, and the second 02. Accordingly, the first order of screw bolts will be known as order 13501, and the fifth order of nuts will be order 94305.

Checking the Quantity. As will be observed, there are three spaces at the bottom of the requisition which refer to quantity, the quantity in stock, the quantity due on previous orders, and the total amount used during the past six months. This information in combination with the quantity asked for gives the purchasing agent all that he needs to know. He can tell what is on hand at the time, he can tell what the average need is per month, how much has already been ordered, and from his records he can tell when that material is likely to arrive. He, therefore, knows whether the amount asked for is excessive or not enough.

Why should he care about this? Because money tied up in stock is idle. The larger the quantity of stock or raw material kept on hand, the more money is tied up, and the larger the working fund must be. On the other hand, the quantity should never be allowed to run so low that the factory may at any time lack the necessary material, for that would lead to another expense—idle machinery.

It is no simple matter to determine how much should be kept on hand of any one item. Experience and judgment must be called upon to determine this, but that does not mean that it can be determined by guess. The factors which play a part in determining the correct amount are: the average daily use, the ease with which a new supply can be obtained, and the length of time that usually elapses between the time when the order is placed and when delivery is made. These considerations will determine how low the supply may be allowed to run and also how large an order must be placed. It is also expensive to order too frequently and too little at one time, for a small order takes as much work at the office and costs almost as much in freight and drayage as a large order.

The Stock Clerk's Duties. In many concerns the stock clerk is a member of the office staff of the purchasing agent. The stock clerk supervises the stock room, and it is his duty to send in requisitions when stocks run low. In order to be able to insure the necessary supply, the stock clerk must keep his stock in a very systematic way, and also must keep careful records.

The best way to keep stock and also raw material is usually in bins. These may be arranged in lanes or streets and numbered with the standard numbers of the articles, very much after the manner of house numbers. At the side of each bin may be hung a

"bin ticket." On this ticket will appear the name, number, and description of the article, and the purpose for which it is used. The ticket also contains columns where the quantity ordered, received, and delivered to various departments, and the balance of stock are shown. This ticket, therefore, tells the nature, history, and present condition of the goods in the bin. In addition to this information, there is shown in a conspicuous place the maximum and minimum which should be carried in stock. An example of such a ticket is given on the opposite page.

The stock clerk uses the information on this ticket to make out his requisition on the purchasing department.

Collecting Information. The purchasing department, after receiving the requisition made out in proper form, must now decide where to place the order.

A well-managed purchasing department will keep information which will make it possible to decide quickly where the order should be placed. Catalogues of firms dealing in the products which are constantly needed are kept on file and carefully indexed, so that information may be obtained with little delay. Market reports are kept up to date, so that prices of the staple products may be known.

In addition to this general information, a card catalogue may be kept in which each article is represented by a card. On one side of the card, the name, number, and description of the article appear, and

	DATE RECEIVED
	INVOICE
	ORDERED
	IN
	OUT
	ON HAND
	SHIPPED

BACK

MINIMUM		
PART NO.		
NAME		
MODEL		
PRICE		
COST	DIS.	S. P.
LOCATION		
MAXIMUM		

FRONT

there are columns in which the past orders are recorded with such remarks as will make it possible to tell at a glance what the experience was with the various firms, whether delivery was made when promised, or whether the articles were up to standard; somewhat after this model:

SPECIFICATIONS _____						
FIRM	ADDRESS	TERMS AND DELIVERY	ORDER N ^o	DATE	PRICE	QUANTITY

As quotations are received from firms, solicited or unsolicited, a record is made of them on the back of the card. In this way information regarding possible sources of supply is accumulated.

Right here a word must be said about the traveling salesman. The modern up-to-date business man no longer looks upon him as a nuisance to be dismissed in any way, provided it is effectively done. The salesman has something to offer which can legitimately demand the attention of the business man.

In order to sell with profit, buying must be done intelligently, and no one charged with purchasing can afford to dismiss any offer that may be made, without giving it attention. Someone in the office should find time to listen, and to give due consideration to any businesslike offer. Firms like the Ford Motor Company, the National Cash Register Company, and others of like importance receive salesmen most courteously and send them away satisfied that they have been given a fair chance to present their case. It has been the experience of these firms that to shut the door to unsolicited salesmen closes the way to the introduction of many valuable improvements, frequently allows buying to fall into a rut, and often leads to an undue favoring of old sources of supply, because of ties of friendship, or for the sake of "rake off," or graft. The purchasing agent should always be approachable, for in no other way can he check his subordinates.

Sending Out Requests for Quotations. Where a requisition is received for unusual goods, and also in those cases where no recent quotations are available, a letter is sent to the various possible sources of supply. Such a letter will usually read:

Gentlemen:

Kindly quote us at once your best price and date of delivery, giving f.o.b. point and terms on the following:
(Here the goods are described in detail.)

Yours truly,

Purchasing Agent

Often the words, "This is not an order," are printed in red across the face of the letter to make sure that the request will not be misunderstood.

When the replies come in, they are tabulated upon a large sheet, giving in parallel columns the name of the firms, the price, the terms, the f. o. b. point, and the date of delivery. At the bottom of the sheet is found a space where the reason for placing the order with the firm finally selected may be indicated. This serves as a permanent record of the placing of the order.

What Determines the Placing of the Order. The purchasing agent in arriving at a decision, is guided by many facts. The price is one of the most important considerations. The f. o. b. point affects the price in that the place where the goods are delivered f. o. b. (free on board) the railroad cars, determines the freight and drayage that will have to be paid. The terms are also important. A cash discount of 6 per cent is not as favorable as one of 10 per cent, while 6 per cent—20d (if paid within 20 days) is better than 6 per cent—10d (if paid within 10 days).

Though the price is an important factor, it alone will not determine where the order will be placed. The quality also must be considered. Nor is the best quality at the lowest price necessarily the most attractive offer. A factory is often not so much interested in the best quality as in the right quality. Its machinery may require a certain grade which need

not necessarily be a high grade, while its finished product sold under a trade-mark must be uniform in quality.

When goods are needed by a certain time, the date of delivery may also play a part in the decision. In short, the order will be placed where the best price for the right quality is combined with the correct time of delivery, with the understanding that due attention must be paid to the records of past performance of competing firms. A firm which failed to deliver on time in the past will not be selected in an emergency where time is highly important.

Following Up the Order. The responsibility of the purchasing department does not end when the order is placed. The department must follow up the order to make certain that delivery will take place when originally promised. This is done by sending a letter or post card to the firm in question, reminding them of the promise, and asking whether delivery will be made on time. This letter is sent sometime before the order is due.

Once the order has been sent off, the purchasing agent will receive due notice from the seller, and he must then see to it that the receiving clerk has the proper instructions so that he may receive and check the shipment without delay. A delay in checking the shipment, in comparing the actual amount and quality received with the amount and quality called for in the order, may result in the forfeiture of the

right to claim damages or rebates. A rebate is a reduction in the price allowed to compensate for failure to deliver the goods according to order.

Where the receiving clerk is not capable of judging the quality of the goods, a special inspector is often appointed and sometimes a laboratory is installed where the articles may be tested, and compared with the specifications. When the order has been properly filled, the purchasing agent notifies the accounting department, which records the purchase, and in time instructs the cashier to make payment.

In some business houses, the purchasing department sees to it that the cashier does not neglect taking advantage of the cash discount by sending him a communication, usually printed on red paper, a day before the end of the period over which the discount extends.

The Purchasing Agent as a Seller. One other function is sometimes intrusted to the purchasing agent and his department. He is often charged with the selling of "scrap," "waste," and "seconds." Scrap is the term used for parts of the machinery which have been used up and have been replaced. Waste may be quite valuable, and may sometimes assume the dignity of a by-product, while seconds are goods which have been produced in the factory, but which have been rejected by inspectors as not quite up to standard. They may be good and serviceable, but they are not good enough to bear the firm's trade-

mark. Where seconds are produced in large quantities they are frequently marketed under a different trade-mark, and they find their way to a different class of consumers through the regular sales channels.

The reason why the purchasing agent is called upon to sell the scrap, waste, and occasional seconds, is that the regular sales department does not know what to do with them. They do not know the people who buy such things. They deal with the small group of wholesalers or retailers who only handle the finished article. The purchasing agent, through his buying of raw and partly finished products, has a wide acquaintance with manufacturers and wholesalers who are more likely to be in the market for such products.

Many concerns leave it to the individual departments to sell their own scrap, waste, and seconds. This is not the most efficient way. The purchasing agent knows the market and by concentrating such sales in his hands, he may build a fairly regular market for them, and consequently obtain better prices.

The Retail Buyer. The buyer in a retail store is quite a different person from a purchasing agent in a factory. After all in a factory the making of an article is the main thing, and proper buying is merely an aid, be it a valuable one. In the retail store it is different. The buyer is one of the most, if not the most important person. In fact, the buyers and the

sales people constitute the store, all the other departments are secondary.

The buyer's work is difficult, but most fascinating. He must know the customers of his store, their likes and dislikes. He must know what they will buy and what they will reject. He must know what prices will make them suspicious of quality, and he must buy with these thoughts in mind. He must never forget that what he buys he is not buying for himself, but for his customers. His tastes do not matter, he must always see with the eyes of the probable customer.

This means that in order to be a good buyer he must first of all be a good salesman, and must have the ability to "size up people." He must constantly be informed of the changing notions of the customers. This he can only do by obtaining the intelligent cooperation of the sales people, so that remarks dropped by a customer may be correctly interpreted and reported.

Determining the Demand. In order to keep informed on the kind of goods customers demand, many stores provide their sales people with "requisition" slips which are filled out whenever any article is requested which is not kept in stock. When frequent calls are made for such articles, the buyer then decides whether it would be wise to place these goods in stock.

Advance sales from a carefully selected but limited stock may also be used to give the buyer some indication of the kind of goods, or the particular model, which will be popular during the season. Additional orders can then be placed for these models.

Many stores maintain a corps of *shoppers*. These are usually women trained for this work, who visit the competing establishments in the city, and occasionally in neighboring cities, to find out what other stores are selling, at what prices, and whether the goods seem to be "moving" or find no sale.

The keeping of a current or perpetual inventory book may also aid in keeping the buyer informed in regard to the popularity of certain goods. Such an inventory book corresponds to the bin tickets in the stock room of a factory, and from it the amount on hand and the average daily sales may be determined at a glance.

It must not be concluded from what has been said that the buyer will not be called upon to exercise his judgment, and that he may rely entirely on such figures and statistics. Most goods are ordered far ahead of the demand, sometimes as much as six months, and the buyer must, therefore, depend entirely upon his judgment when determining, not only what, but how much he is to purchase.

In deciding the quantity he will order, he must study not only his own customers, but the general economic conditions as well. If the crops in a certain

section of the country are exceptionally large, and good prices prevail, the quantity of luxury goods purchased may safely be made larger, and there will also be better markets for agricultural implements than when the crops are poor. In the latter case, even necessities may not find a ready market. When, after a period of high prices and speculation, a change in the world's affairs makes the immediate future uncertain, a general policy of waiting among customers will make it unwise for the retailer to stock heavily with goods. He always runs the risk when buying at the old high prices of being forced to sell at a much lower price.

The buyer must, therefore, study carefully the market reports and the financial papers, watching for every sign which may give him a clue to the possible future conditions of the retail market. He must also bear in mind the relation of goods to events. A high price for cotton will mean a large acreage planted in cotton, and this will create an active demand for farm implements. National holidays will mean a demand for flags and emblems, and a national "swat that fly" campaign will result in an increased demand for fly swats, fly traps, and fly paper. In all such purchases, extreme care must be exercised, for to be caught with a large stock of "specialties" when the demand is gone will mean heavy loss. The stores which had large stocks of service flags and buttons, officers' uniforms, and other military equipment on

hand when the armistice was signed, have been compelled to sell much of this stock at, or even below cost, in order to clear their shelves for the goods demanded by civilians.

How Buying Is Done. Retail stores are constantly visited by traveling salesmen representing wholesale firms or manufacturers. Much of the buying of retail stores takes place through these representatives and also from catalogues. But this method of buying is largely limited to more or less standardized goods such as hardware, tobacco, and groceries. Goods which are subject to fashions cannot successfully be bought in this manner. No buyer can afford to place an order with one firm until he has had an opportunity to see what other firms have to offer, and what the prevailing styles and models are that season.

The buying of such articles is, therefore, usually not done at home. The buyer travels to the place where the articles are produced, or where the wholesale dealers are concentrated. He visits many establishments inspecting practically the entire stock before he places his orders. Some buyers travel abroad visiting the manufacturing wholesalers of Paris, Lyons, Brussels, London, and other important commercial centers. In some cases, buyers travel for this purpose both to Europe and Asia. They go to Ireland to buy linen and take this material to Japan to supervise the embroidery, after which they import

the finished articles into the United States. Such buying requires a thorough knowledge of the domestic and foreign markets, and requires a considerable outlay. In the case of women's apparel, however, there seems to be no other method but this direct buying by the firm's representatives.

Much of the original designing of ladies' wearing apparel is still done by the artists of Paris. The American wholesale houses send their agents abroad to make selections after a careful study of the models in the shops and of the styles on the Boulevards.

The American representative will then purchase one or a number of the most successful creations. The manufacturer copies it and modifies it somewhat and need have no fear that others will produce the same design.

The buyer of the retail store visits the wholesalers of New York or Chicago and has, therefore, a large market to choose from, a market which represents the best effort of the designers of two continents. In order to aid the buyers of women's apparel, the wholesale firms maintain showrooms where the buyers are seated in individual booths while living models walk past displaying the various garments which the firm has for sale. As each girl passes by the booth she announces the stock number and the price of the article and the buyer jots down notes upon a memorandum pad from which he later makes up the final order.

In some cities a tendency is noticeable to concentrate all such display rooms in one or a small number of buildings, so that a buyer may lose no time in traveling from place to place. In New York the Bush Building on Forty-second Street near Broadway is an example. This is a large building of great beauty of which the lower floors are fitted out as clubrooms, restaurant, barber shop, men's and women's parlors for the comfort of men and women buyers, while the upper floors are entirely devoted to showrooms. Many of the best-known manufacturers of shoes, hats, and of men's and women's clothes have showrooms and offices in this building.

Supervising the Selling. The buyer of the retail store is held responsible if the goods which he has purchased do not sell. He is, therefore, directly interested in the selling methods of the store, in the way in which goods are advertised or displayed, and in the character, training, and efficiency of the sales people. This phase of the retail buyer's work will be discussed in detail in the chapter dealing with retail selling.

The Purchasing Agent in the Retail Store. Besides the buyers, of which, in some cases, there are as many as there are departments in the store, there is, in all large stores, a purchasing agent whose duty it is to buy current supplies, such as wrapping paper, twine, writing paper, and other office supplies, and who may also be charged with buying the store fix-

tures and office equipment. His duties are essentially the same as those of the purchasing agent in a factory and need, therefore, no further description.

Summary. Purchasing is quite as difficult and important as selling. It is preferable to centralize purchasing in one office. The purchasing department places orders upon requisitions received from stock room, storeroom, shop, or office. Care is exercised to order just enough, and of the right quality. The purchasing agent must keep information showing the record of past purchases, possible sources of supply, market prices, etc. The order is placed after considering price, quality, terms of payment, time of delivery, and the record of the firm. The purchasing agent may also be in charge of the selling of scrap, seconds, and waste.

Buying for a retail store is quite a different thing from buying for a factory. Retail buying requires a knowledge of customers, of store policy, and of the wholesale market. A constant study of markets is necessary. Buyers supervise selling.

REFERENCES

Same as preceding chapter. Additional references:
C. C. Field. *Retail Buying*. Harper & Brothers.
H. B. Twyford. *Purchasing*. D. Van Nostrand Company.

QUESTIONS FOR FURTHER STUDY

1. Contrast the consequences resulting from efficient and inefficient buying.

Reference: Twyford. Chapter I.

2. How is the purchasing department frequently organized?

Reference: Twyford. Chapters V, VI.

3. What is meant by a *merchandising plan*, and what is its relation to the buying for a retail store?

Reference: Field. Chapter IV.

4. What are the various steps in the buying process?

Reference: Field. Chapter V.

5. What qualifications must a retail store buyer possess?

Reference: Field. Chapter XV.

6. What qualifications must a purchasing agent possess?

Reference: Twyford. Chapter IV.

7. How are invoices handled in a purchasing department?

References: Twyford. Chapter X.

Parsons. *Office Organization*. Chapters XXII, XXIII, XXIV, XXV.

TEST QUESTIONS

1. What kind of information should be collected in a purchasing department?

2. How does a purchasing agent decide where to place an order?

3. How is the order placed?

4. Of what does the work of a retail buyer consist?

5. What information can be obtained from an inventory book?

CHAPTER XIII

MARKETING

The Term Defined. Under the term "marketing" we understand the processes by means of which goods pass from producer to consumer. The ultimate object of marketing is to place the goods in the hands of the consumer. The chain that connects the consumer with the producer may be simple or complex. Some goods pass directly from the producer to the consumer, while other goods usually follow a roundabout way and pass through the hands of a number of "middlemen" before they reach the ultimate consumer.

The methods of marketing agricultural and other raw products are quite different from those used in connection with manufactured articles. The reason for this is not difficult to see. Raw products cannot be marked so that their identity may be traced. Wheat in a New York elevator may have been grown in the Dakotas or in Canada; once it has left the farm, the farmer himself would not be able to recognize it. Such articles are, therefore, always handled in bulk and are bought and sold according to quality and quantity.

In the case of manufactured products this is different. There is an almost unlimited range of possibilities in making any one article. In order to buy these goods intelligently, they must be inspected or they must be guaranteed by some reputable dealer to be uniform in grade by means of a trade-mark.

These fundamental differences affect the method of marketing and make it necessary to divide our description of marketing into two sections. We shall first deal with the marketing of farm products, and shall then discuss the marketing of manufactured products.

The Marketing of Farm Products. When the country was but sparsely populated and the cities small, the farmers living in the immediate neighborhood of a town would almost wholly supply the consumers direct. In many of the smaller towns farm products are still marketed by "hucksters" who go from door to door. In the larger cities farmers often sell to the consumers in the municipal markets. Such markets are found very generally in Europe and are more and more being introduced in this country as a means of cutting down the cost of bringing farm products to the consumer.

The local stores frequently sell the products which they have bought "in trade" from the farmers. Potatoes, eggs, poultry, apples, and vegetables are commonly handled by these stores. They usually only supply the local trade, though sometimes they

also ship the surplus out of town to the larger cities.

In some parts of the country the local store plays a very important part in the economy of the community. In the South these stores supply the farmer with all he needs during the year on credit. The farmer pledges his crop with the storekeeper as security for the goods received, and agrees to sell the crop to him. The dealer charges a high rate of interest on the loan and deducts a fat dealer's profit or commission from the price of the crop. The farmer, therefore, finds this method of obtaining credit very expensive.

The Local Buyer. The farm products which the local market cannot absorb are usually sold to local buyers who ship the products to the distant cities or trading centers. These buyers perform important services. They provide for the farmer a ready market; they look after the making of shipments, thereby relieving the farmer of all responsibility and risk; they combine the products into large shipments, thereby securing better transportation service; and finally, they sort and grade the products. The large quantity of products handled by them makes this grading possible.

Grading of Products. The trading in raw products is much expedited by a system of grades. Before grades were introduced, wheat, cotton, wool, and other similar products could not be sold until they were inspected by the buyer. This meant that these

products could not be sold by the farmer or the local buyer to the consumer or manufacturers until the goods had actually arrived in the trading centers. There was much uncertainty in regard to the price the goods would bring in that market.

Through the introduction of grades the quality of the goods is standardized and is definitely known. This makes inspection of the goods themselves unnecessary when they are offered for sale. They are now sold by grade. Wheat, instead of being sold by sample, is now sold as Red Winter No. 3, Spring Wheat No. 1, or by some other name and number. Cotton, sugar, and a long list of minor farm products are in this fashion sold by standard grade. These products may now be sold before they reach the market. The prices of the standard grades are publicly announced and it is, therefore, possible to direct the goods to those markets where the highest price is paid.

The Exchanges. The character of the central markets has been changed in consequence of the introduction of standard grades. Before these grades were used, goods were sold at auction as they arrived. Now they may be sold on exchange before they have arrived. They often change hands several times while traveling from one market to another. These exchanges are usually incorporated associations of dealers in farm products. There are exchanges which handle only one commodity, such as the New Orleans

Cotton Exchange, while others handle a variety of products, as, for instance, the New York Produce Exchange, where grain, flour, and meat products are bought and sold.

The methods of dealing on these exchanges, and the conditions of membership are all regulated by the association. The exchanges play an important part in establishing and maintaining standard grades. Many of them undertake to inspect, weigh, and to grade the products. An arbitration committee settles controversies between members. A statistical department collects and distributes among the members information in regard to the conditions of the crops in this, and in other countries, and other data likely to affect the present and future prices of the products.

Since the grades established by these well-known exchanges are internationally known, their prices also become world prices.

The Wheat Trade. The wheat market is, perhaps, more perfectly organized than any other. The wheat bought by the local dealers is stored in the local elevators. These are large storehouses. Many of them are owned by the local dealers individually or co-operatively. Others are owned by large "line elevator companies," and still others are owned by the farmers' co-operative organizations. The line elevator companies are large concerns which maintain elevators in various sections of the country.

They buy the grain from the farmer through traveling agents and sell it on the exchange through their own representatives. They, therefore, have the advantage over the local buyers who must sell through some broker to whom they must pay a commission.

As the grain is placed in the elevators it is graded, but these grades are not official. The official grades are not established until the grain arrives at the *primary market*. These primary markets are great collecting centers for the grain of their territory. There are many such markets, Minneapolis, Duluth, Chicago, Omaha, St. Louis, and others. In these markets the grain is concentrated and held until it is withdrawn for exportation or for domestic consumption. The grain is shipped to these markets from the local markets. As it arrives at the primary market it is cleaned, graded, and mixed with other grain. The large exchanges are established in connection with these primary markets.

Financing the Wheat Crop. The local buyers or agents pay cash for the crop. They have the grain stored in the local elevators and receive warehouse receipts upon which they may borrow money from the banks placing the "grain paper" with them as collateral. In case the grain is shipped to a buyer in a primary market the local buyer may use an "order" bill of lading as collateral and draw a draft which may then be discounted at the bank. The bank takes the draft and the bill of lading which is made out to the

“order” of the shipper and forwards these documents to its correspondent. The correspondent notifies the consignee, who must first pay or accept the draft before he can obtain the bill of lading which gives him ownership of the grain. Accepting a draft means to write across the face of the draft the word “accepted,” with the date, and properly signed.

The buyer at the primary market may then place the wheat in the large elevators maintained at these markets and use the warehouse receipts as collateral for a loan.

From the primary markets the wheat passes into the hands of millers, exporters, and others through whom it finally reaches the consumer.

The Cotton Market. The marketing of cotton is, in principle, the same as that of wheat. The farmers usually sell their cotton in the local market to the merchants and to the agents of large cotton buying firms, or to the local *gin*. The gin is a mill where the fiber is separated from the seed. From this local market it is moved to the mills, the ports of export, or to the central markets in the interior. The bales of cotton which leave the gin are usually poorly baled and but loosely packed. They must, therefore, be “compressed” at the nearest compress. This reduces their size about one half and tightens the pack, so that less freight space is required and the loss in transit is diminished.

The domestic mills buy their cotton largely from the large buying firms, and only to a limited degree through brokers on the cotton exchanges. The reason is that the mills need a certain grade of fiber and that the sales contract on the exchange allows for the substitution of one grade for another when making delivery. The official grades, as in the case of wheat, are determined by the exchanges. These grades are based upon the length of the fiber, the color, and the amount of foreign matter or trash. There is no absolute uniformity in these grades. The grades of different American exchanges differ among themselves, and are again different from the grades established by the European exchanges.

The cotton that is exported has either been bought direct in the local market or has been purchased on some exchange. It has frequently been sold on some European exchange even before it leaves the United States.

The Marketing of Other Farm Products. Not all products of the farm are as successfully standardized as cotton and wheat. Nor is such standardization possible in every case. There is, however, a growing tendency in that direction. In many lines, notably in the case of oranges, lemons, and grapes, co-operative organizations among the farmers sell direct to the wholesale trade. They grade and pack the fruit and ship it often under a co-operative trade-mark. The "Sunkist" oranges are an example of such a

highly developed method of marketing applied to farm products.

The Marketing of Manufactured Products. Manufactured products require different marketing methods from those used for agricultural products. In buying and selling manufactured products a real bargaining process takes place; the article is scrutinized and compared with others similar in construction and purpose. The price for these articles is not a world price as in the case of cotton or wheat. Since the products are not uniform in quality, they cannot be sold, except upon inspection, or on the basis of samples, and the price is attached to each article. All White Winter Wheat No. 1 is sold at the same price; all *low middling cotton* sells at the same price at any one time and place, but who ever heard of a price for shoes No. 9, or a price for hats No. 7?

Selling manufactured goods means, therefore, something different from selling farm products. Manufactured goods do not sell themselves. If one has hats for sale it will be necessary to convince some buyer that he particularly desires one of those hats to the exclusion of hats produced by others. There is much more of the personal element involved in the selling of manufactured goods. The buyer must be persuaded, if not that he is in need of an article, at least that he should buy one rather than another.

The manufacturer may choose many methods of placing his goods in the hands of the consumer. At

one time most manufactured goods—and this applies also to the various “package” goods and other groceries sold under a brand or trade-mark—reached the consumer after a roundabout journey, passing successively through the hands of manufacturer, jobber, wholesaler, and retailer.

The Various Middlemen Defined. The retailer makes it possible for the consumer to supply himself quickly with small quantities of a large variety of articles. The wholesaler furnishes the retailer with the goods he sells to his customers; in a way he performs somewhat the same service for the retailer which the retailer performs for the consumer. By buying from the wholesaler, and not from the manufacturer direct, the retailer is saved the trouble of establishing connections with many manufacturers. The orders he would be able to place with each one of them would be relatively small. He would, therefore, not be able to command very favorable credit terms, nor would he be able to obtain good transportation rates on his shipments. By buying through a wholesale house a retailer may obtain an assorted lot composed of a variety of articles, which together make a fairly large order. He is, therefore, able to obtain better terms. The wholesaler, located at a convenient center, receives the goods in carload lots from the manufacturers at favorable transportation rates. These goods when reshipped to the retailer have paid less freight than would have been paid by

the same shipment if shipped direct from manufacturer to retailer.

A jobber, strictly speaking, is a dealer who buys *jobs*, *i. e.*, special lots. These he resells at a profit to wholesalers and retailers, or sometimes direct to consumers. In fact, the jobber has neither a regular place to buy nor a regular place to sell the goods he handles. More recently, however, the jobber has become quite indistinguishable from the wholesaler, and the two names are now used as if they were synonymous.

The brokers or commission merchants sell the manufacturers' goods to wholesalers, jobbers, or retailers on a commission basis, while frequently they receive goods on consignment in which case the fixing of the price is largely in their hands. Many firms are called "commission men" or "brokers" when, in fact, they are wholesalers.

Selling at Retail. One method of selling at retail is to sell through canvassers. This method is a modern form of the old-fashioned peddler with this distinction, that the canvasser rarely ever carries his goods with him, but usually sells by sample. In certain lines, and especially in country districts where retail stores are entirely absent or are inefficient or unprogressive, selling through canvassers may be an effective method. Kitchen utensils, books, maps, and magazines are sold successfully by this method, notwithstanding the prejudice which

has been created against the canvasser by the selling of worthless articles by unscrupulous members of the guild.

The local retail store is, however, by far the most important channel through which goods reach the consumer. Success in retailing is no longer easily attained, and comes only as the reward of careful attention to all the factors which make for competitive strength. Price—at one time the principal factor in competition, and still of great importance—is no longer the sole factor. More and more, consumers demand and receive superior service, frequently, though not always, paying a higher price. The difference in the prices of the cash and carry grocery stores, and those of the stores which deliver and sell on credit, are a case in point. The problem of the retailer is how to give maximum service, and still sell at a competitive price.

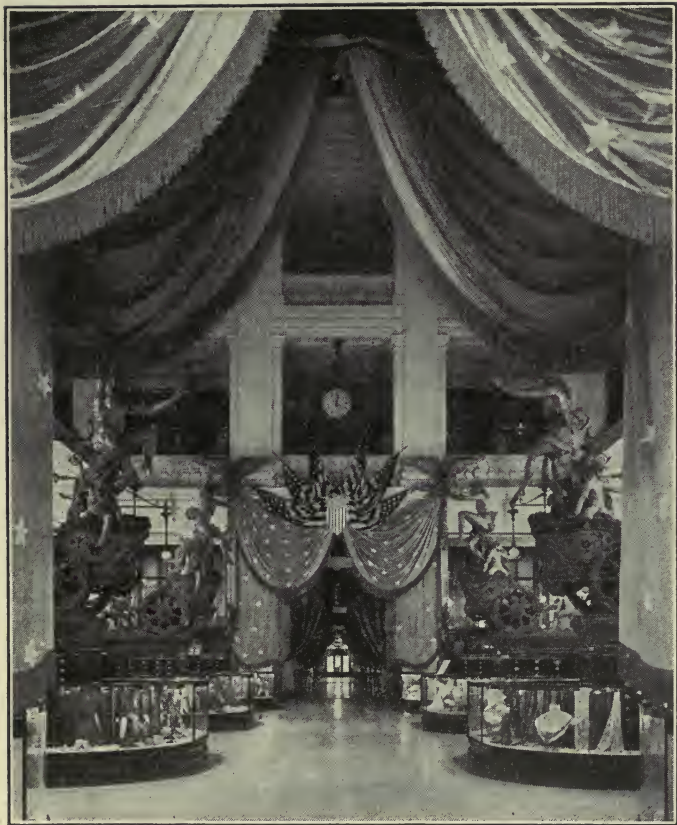
Retail stores may be divided into three large classes: the general stores, the specialty stores, and the department stores. The general store is found in country districts. Here goods of all kinds, groceries, notions, dry goods, shoes, kitchen utensils, and farm implements are sold in the same building.

A specialty store handles only one product or class of products. A shoe store, a hardware store, a grocery store, are all specialty stores. Such stores can only be conducted profitably where the amount of trade is sufficient to warrant specialization. They

present a decided advantage over the general store. Their specialization enables them to keep a larger and better selected stock; the storekeeper can study his market more carefully than where he has to divide his attention over a large number of products. This means more careful buying and, therefore, a more rapid turnover and, consequently, a fresher and more up-to-date stock.

The Department Store. The department store consists of a group of stores housed in the same building. These separate stores or departments are, as a rule, not separately owned, but are owned by one firm though managed by different department managers. Many such stores in our large cities are of gigantic proportions. The Wanamaker stores in Philadelphia and New York, Filene in Boston, and Marshall Field in Chicago are nationally known.

The public favors such stores because of the many conveniences they offer. Shoppers in need of a variety of articles may make all their purchases in one store and are, thereby, saved much time and strength, while the rest rooms and restaurants of such stores make them convenient meeting places. The rapid and large turnover reduces the overhead per unit sold. This is offset to some extent by the greater expense entailed in the upkeep of the expensive public conveniences which shoppers have learned to demand in a department store.



Marshall, Field and Company
Entrance to Chicago Store

It is interesting to note that many small specialty stores are frequently doing an apparently profitable business in the very shadow of the large department stores. Many causes are responsible for this. Many shoppers appreciate the personal interest which a small storekeeper or his employees take in their comparatively small number of customers. This personal element is almost wholly lost in the large department store. The smaller store also offers advantages to the shopper who has little time to spend in making his purchase. There is a class of buyers who hesitate to enter a large and beautifully equipped store and prefer to deal in a modestly fitted small store. Finally, there will always be a demand for the "exclusive" shop which appeals to the whims of those who do not care to buy the common standard goods, but demand exclusive patterns and high prices.

The Chain Store. Another strong factor in retail competition is the establishing of chain stores. The specialty store usually operates under relatively unfavorable circumstances. Because of its comparatively small turnover, its bargaining power in the manufacturing and wholesale market is not of the strongest. Its advertising possibilities are restricted to the one line handled and to the locality in which it operates.

The department store attempts to meet these problems by combining a large number of stores under one roof, thereby increasing its buying and

advertising strength. The chain stores are another attempt to accomplish the same result. In this case, however, the method is to establish many stores of the same type in various parts of the same city and also in other cities. Many chain stores have thus become nationally known. The F. W. Woolworth Company five-and-ten-cent stores, the United Cigar Stores Company tobacco stores, the Kroger grocery stores in Ohio, and the Stop and Shop stores in Seattle are examples.

Such chain stores, because of their large turnover, can buy more advantageously. They usually buy for cash, since most of them do a strictly cash business with their customers. Their advertising appeal is not limited to one locality. When, as is usually the case, many chain stores are located within a small area, the actual stock carried in any one of them may be kept very small, thereby saving expense. A central distribution warehouse may then carry a relatively small surplus with which to supply the stores quickly as the stock runs low. The quantity that must be kept on hand in such warehouses is only a fraction of the quantity that would be lying idle if all stores kept their own reserve stock.

Chain stores may be retail stores which buy from wholesalers or manufacturers direct. Those mentioned above are of this type. They may be maintained by manufacturers as an outlet to the consumer, thereby eliminating the middlemen. The

Hanover Shoe Company, and the Singer Sewing Machine Company follow this method. A third possibility is presented when stores individually owned combine in order to buy and to manufacture co-operatively. The Rexall stores are of this type.

The Mail Order Business. Another method of selling to the ultimate consumer is selling by mail. The mail order business is especially of importance in rural communities which do not have the advantage of efficient and up-to-date store service. As in the case of the department store and the chain store, the usual middlemen are frequently dispensed with, and the mail order house buys frequently direct from manufacturers, even contracting for their entire output. The mail order house is justly looked upon as a dangerous competitor to the country retailer.

Advantages and Disadvantages of Selling by Mail. Wherever the mail goes, there the printed advertising matter and the goods shipped by the mail order house can also go. Through profusely illustrated catalogues the country dweller is enabled to select his goods from a large stock. The catalogues of Sears, Roebuck and Company, and of Montgomery Ward and Company are found in the remotest corners of the country and have contributed no little to raising the standard of living in rural districts.

The business is almost always on a cash basis. This makes for economy, since bad debts, collection expenses, and interest on the investment made in

goods in the hands of customers, are all eliminated. The overhead expenses are low, since the only equipment required is an office building. This item is offset by the very high expense of the printing and distributing of catalogues. Another saving is found in the better terms such houses can make with manufacturers and jobbers as a result of their large and rapid turnover. Mail order houses are, therefore, frequently able to sell at lower prices than the "legitimate" retail stores.

The disadvantages of selling by mail must not be underestimated. Customers demand not only a low price, but also service. The mail order house falls short here and can never hope to supply it. The fact that illustrations, however successful, can never quite take the place of actual inspection of the goods is also an argument in favor of the local stores. Customers are also more inclined to spend freely when they buy on credit than when they are obliged to pay cash—this is especially true in country communities.

The local store, if managed properly, need have little fear of being driven out of business by the mail order house. The superior service, the personal attention, and the credit facilities which it can offer its customers, combined with the fact that goods can be inspected and are available without delay, makes its position secure.

The Manufacturer and the Market. The manufacturer has, therefore, many channels through which

he may reach the consumer. No matter which he chooses, however, he faces two problems: He must, first of all, persuade the middleman to handle his products, and then the customer must be persuaded to buy them in his turn.

The middleman, especially if this middleman is a large wholesaler, chain store, department store, or mail order house, can withhold his patronage if he so chooses. Manufacturers will, therefore, often underbid each other in an attempt to establish permanent relations with some large trading concern. Such a connection which will absorb all, or almost all, the manufacturer can produce, relieves the manufacturer of all marketing worries and cuts his selling expense to a negligible figure.

He now finds himself at the mercy of the middleman. He may protect himself by marking his goods in a conspicuous way with his name, and by attaching to them a "trade-mark." Once he has begun to use this distinguishing mark no one else can legally make use of it. In this way the manufacturer may gradually build up a good will for his products with the consumer, and the middleman may be compelled to handle the products in order to satisfy the demand of his customers.

But the danger of substitution is a serious one. The middlemen may attempt to displace the articles with those of another manufacturer who quotes more favorable prices. They may even go so far as to buy

unbranded goods and to mark them with their own trade-marks.

The manufacturer may protect himself to a large degree against this tendency by entering upon an advertising campaign. In other words, he can make his appeal directly to the consumer. Through national advertising the name of the manufacturer or his trade-mark becomes at last associated inseparably with the name of the product. When we speak of shaving soap the names of Colgate, Mennen, and Williams at once come to our minds. The word "rolled oats" at once suggests Quaker. Almost all articles of daily use have thus become associated with trade-marks and manufacturers' names through national advertising campaigns.

The possibility of substitution is not absolutely eliminated, but is much lessened by such advertising. A customer who asks for Colgate's soap usually has made up his mind that he wants that soap and no other. In most cases he will go to some other store rather than accept a substitute. He has learned to have confidence in the honesty of the maker. The nationally advertised trade-mark stands for absolutely uniform quality and for uniform price. It facilitates his shopping for he need not exercise his judgment as regards quality and price. He will, therefore, usually look with suspicion upon any attempt to sell him what he did not ask for. Especially

so if the article offered as a substitute bears the trade-mark of the retailer.

The retailer who is thus forced to sell trade-marked goods loses much of his former importance. He becomes more and more merely a distributing agent of the manufacturer. He is more and more giving up control of quality and price, for these tend to become questions of selling between manufacturer and consumer.

The retailer continues to play an important role, however. The judgment exercised in the selection of goods, the attractiveness of the store, and the efficiency of its service continue to make the difference between success and failure in retail selling. The retail store must supplement the national advertising of the manufacturer by local advertising, so that buyers will know that his store carries certain brands of goods. A knowledge of advertising is a necessary part of the equipment of a retailer as well as of a manufacturer. The next chapter will be devoted to a study of advertising methods.

Summary. The marketing of agricultural products is different from that of manufactured goods. In the case of agricultural products the producer is usually lost sight of. Middlemen handle his products until the consumer is reached. Grading of these products facilitates handling them and makes it possible to establish world prices for them. The usual steps in the marketing of these products are: (1) local market

where goods leave the hands of the producer, (2) primary market where goods are graded and sold on exchanges, (3) export or sale for domestic use.

Manufactured products usually pass from manufacturer to jobber, or wholesaler, and from him by way of the retailer to the consumer. Retail selling may take the form of general, specialty, department, and chain store, or may take place by mail.

The manufacturers are endeavoring to make themselves less dependent upon the middlemen by creating a consumer's good will through national advertising. The need for middlemen, however, continues to exist.

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G. G. Huebner. *Agricultural Commerce*. D. Appleton and Company.
L. D. H. Weld. *The Marketing of Farm Products*. The Macmillan Company.
Ralph Starr Butler. *Marketing Methods*. Alexander Hamilton Institute.

QUESTIONS FOR FURTHER STUDY

I. Give a detailed statement of the jobber's service to society and draw the conclusion whether the jobber should or should not be dispensed with altogether.

References: Butler. Chapters XI, XII.
Field. Chapter II.
Weld. Chapter I.

2. Has the retailer nothing to gain from handling nationally advertised goods?

Reference: Butler. Chapter X.

3. What are the principal factors in retail competition?

References: Butler. Chapter V.

Field. Chapter VIII.

Weld. Chapter XX.

4. Describe the marketing of wheat.

Reference: Huebner. Chapters II, III, IV.

5. Describe the marketing of cotton.

Reference: Huebner. Chapters V, VI.

TEST QUESTIONS

1. What are the usual channels through which manufactured goods reach the consumer?

2. Will the competition of the mail order house drive the country stores out of business?

3. What arguments can you give which are in favor of a manufacturer carrying on a national advertising campaign?

4. What are the competitive advantages resulting from the chain store organization?

CHAPTER XIV

SELLING AND ADVERTISING

Selling an Important Function. The relative importance of selling as compared with production has much increased in recent years. In earlier days goods were to a large extent produced to order. In other words, the need existed and was expressed before the goods were produced. Selling, therefore, was of little importance. The traveling merchants who carried the goods of other cities or of other countries were real salesmen, but their trade was of small importance when contrasted with the trade of the domestic producers.

In recent days, however, as a result of the introduction of machinery and the economies resulting from large scale production, production goes on quite independently. The problems have been reversed. Formerly the problem was to produce what had been ordered. Now the problem is to sell what has been produced. The ability to sell limits the size of the factory.

Manufacturer and Middleman May Co-operate in Selling. As was indicated in the preceding chapter, the manufacturer in order to dispose of his goods may undertake the sales campaign himself, or he may follow the usual channels of jobber, wholesaler, and

retailer. In the latter case he does not necessarily leave all selling efforts to the middlemen. The manufacturer is vitally interested in securing enthusiastic co-operation from the retailer. The manufacturer wants to see the retailer make as many sales as possible and will frequently aid the retailer in disposing of his goods. This aid may take various forms. It may consist merely in supplying the retailer with attractive folders which explain the nature and use of the articles to the consumer, or the manufacturer may send the retailer a generous supply of samples, leaving it to his discretion to dispose of them to the best advantage. Again, the co-operation may be more direct, and expert window dressers or salesmen may be sent out.

These representatives of the producer travel from town to town, stopping a few days or a week in each, and carry on intensive sales campaigns. Strikingly arranged window displays are supported by advertisements in the local papers. The customers who enter the store are induced to witness the demonstrations by the factory salesmen. Apart from the immediate results, this method has the additional advantage that the retailers, after witnessing the methods of these trained representatives, are themselves in a better position to push the products more vigorously.

Advertising as an Aid in Selling. The manufacturers may also support the retailer in his selling by

an advertising campaign. This campaign may take different forms. It may be a national advertising campaign of short or of long duration, with little direct relation to specific localities, or the manufacturer may in his national campaign establish a definite link with the local efforts. The manufacturers may arrange with the retailer for special displays and special prices during some one day or week and then advertise the fact nationally. The "Gerard Week," "Palm Olive Week," and "Edison Week" are examples of this method of co-ordinating the national with the local sales campaigns.

In order to aid the retailers in their local advertising campaigns, the manufacturer may prepare for them advertisements to be inserted in the local papers, leaving a space in which the name of the local dealer may be inserted. The Hart Schaffner and Marx clothing firm follows this method. Many automobile firms also make use of this method to standardize and to raise the quality of local advertising. Sometimes local dealers all handling the same products will co-operate in their advertising. The Ford agencies in some of our larger cities do this frequently. The car is advertised and at the bottom of the advertisement a list of the dealers appears.

Advertising and Selling Compared. We have here referred to advertising and selling and have pointed out how one may be called on to supplement the other. This may need a further word of explanation.

The salesman in the store meets the consumer face to face. His problem is to adjust his arguments, his selling talk, to the mentality and prejudices of the particular person with whom he is dealing. Advertising is really a selling talk, not with an appeal to one particular person, but to a class of persons. The underlying principles which determine the success of a selling talk in the case of the salesman, also determine the success of an advertisement.

The advertiser has a somewhat more difficult situation to cope with. The salesman has a flesh and blood person before him. He can watch the effect which his words have upon his listener. He may answer questions or dispel objections.

The writer of advertisements, however, addresses himself to an imaginary audience. Many advertisements fall flat because they fail to conceive some definite audience, and fail to direct the appeal to this group. They have the same effectiveness as a salesman would have who turned his back upon his customer and addressed his remarks to the goods behind the counter. Other advertisements are failures because they are weak in "selling points." They are like a salesman whose entire repertoire consists of a few stock phrases like: "These are the best you can buy anywhere;" or, "They wear'm a lot this season."

Such phrases do not carry conviction. They do not awaken a desire to buy. This leads us to the real

test of a salesman's talk and of an advertisement. They have this in common, that they should arouse in the listener or in the reader the desire to buy, and should make him act upon this impulse. This last phase is quite important for, unless the customer actually buys, all efforts are wasted. Both a sales talk and an advertisement should, therefore, lead its audience through the following stages: attention, interest, and action.

Attention. First of all, the attention of the possible buyer should be attracted. The salesman will frequently discover that the customer has already fixed his mind upon a certain article. In such cases we may say that attention is already present and need not be awakened. Where he finds the customer undecided or "just looking around," he has an opportunity to show real salesmanship. Once the attention has been aroused, the first step on the road to a successful sale is made.

This may sound easy, but is in fact a most delicate matter. It requires tact and a delicate intuition to approach a stranger in such a way that he will give his attention. It is possible to arouse a feeling of resentment in a customer by an awkward approach.

In advertisements it is equally important to attract the attention in the right way and to hold it. But attracting the attention is only the first step and relatively simple. It is easy to attract attention in a printed statement as it is easy to attract atten-

tion when addressing a person. It is a more delicate matter to attract a sympathetic attention and to arouse the willingness to listen to further arguments.

Interest. It is necessary to arouse an interest in what you have to say. Many advertisements fall short in this respect. They attract the attention by some freakish means, but fail to arouse interest. Usually they are at fault in that they attract attention by means that have no connection with the article to be advertised.

As an example we may take the picture of a man pointing his finger at the reader while large letters address themselves to him with the words, "*You must consider.*" This method of arresting the attention of the reader was quite common at one time. It is offensive and is poor psychology. Even in the case where the reader does not resent being spoken to in the tone of a command, there is no connection between the attention attracting device and the article advertised. The same words, the same pointing finger, may direct you to consider the good virtues of shoe polish, of toothpicks, or of a talking machine. That is the reason why such an appeal is not effective. The reader must bridge the gap between the device which attracted his attention and the article advertised, or the message which the advertiser hopes to "put across." A large percentage of readers will never bridge this gap.

The same principle holds true in the selling talk of the salesman. A salesman may work his way into an office under some pretext or other, but unless he is successful in holding the attention of his prospect when the article in question is shown, his visit will be a failure. A carefully planned approach will attract the attention by arousing an interest. In other words, the two stages will blend. In the case of the salesman it will usually mean that he will take the very first opportunity to show the goods he is endeavoring to sell with some remark which will at once link the customer to the goods by ties of self-interest.

No one will ever buy anything until he feels that his pleasure, comfort, safety, or appearance will be benefited. The very first words of the sales talk must, therefore, be calculated to awaken in the mind of the customer some picture of himself as possessor of the goods. The appeal must, if possible, be to the imagination.

In an advertisement this will mean that the best method of approach is by some attractive picture showing the article in use. An auto out in the woods surrounded by beautiful scenery and a happy family enjoying a ride; a nicely dressed woman handling a vacuum sweeper with one hand, evidently enjoying the work—these are pictures that arouse a sympathetic interest.

By way of contrast, it may be effective to show, though less prominently, some unpleasant alternative. A tired family on a hot summer day pushing its way into a crowded street car calls up memories of disagreeable experiences which the auto will forever eliminate.

A picture of a tired woman breathing in the heavy clouds of dust stirred up by her broom will make a vacuum sweeper seem more desirable.

By this same type of subtle suggestion the window display of a store may appeal to the imagination of those who pass by. A clerk, by gracefully displaying an article may also make it easy for the customer to imagine herself in possession of it. In other words, if possible, the interest in an article must be aroused in such a way that the interest will lead naturally to the desire to possess it.

Both in the sales talk and in the advertisement, the greatest care should be exercised to avoid everything which may distract, antagonize, or lead the prospect to make up his mind that he does not care to acquire the article.

The clerk or salesman should be neatly and inconspicuously dressed. A loud necktie, bright yellow shoes, or a soiled collar will call attention to themselves, and the customer will unconsciously focus his attention upon them. Much of the force of an otherwise splendid approach and selling talk will consequently be lost. Careful attention to minute

details is, therefore, necessary to prevent distraction.

Similar care must be exercised to avoid setting up antagonistic trains of thought. No statement should be made which implies that some valid criticism might be made of the article. A difference in wording may often make an appreciable difference in the reaction which it awakens, though the thought conveyed be the same.

"This is much cheaper" may lead the customer to think that the quality will also be "cheap." It is better to say, "This is less expensive." It is better still to avoid mentioning the price until the desire has been fully aroused and the customer is ready to buy. It is dangerous to mention price early in the sales talk, for the mere mention of the price may mean a sudden dissipation of all interest.

Once the customer has accustomed himself to looking upon the article as already his; once he has imagined himself as the proud owner, the mentioning of the price may for a moment dull his interest, but he is much more likely to be carried along by his own desire and enthusiasm. The buyer should be led to make up his mind favorably. He will then frequently argue himself into buying the article even at a price which he would not have considered at first.

Meeting Arguments. The best way to meet arguments is to avoid them. Few people remain pleasant

under argument. They feel a sense of pride in their original objection and will often resent being shown that they are wrong. The rule is, therefore, avoid arguments. This may be done in two ways. First of all, by anticipating the objections. This necessitates, as will be brought out later, a careful study of the article and also a keen sense of the buyer's psychology.

The second method is to answer the objections pleasantly, giving the buyer full credit for having such a keen knowledge of the goods, and to demonstrate, if possible, the lack of foundation for the criticism, and at the same time avoiding contradicting the customer.

To give an example, suppose you are selling an automobile. The prospect seems interested, but he says, "They tell me it is no good on hills." Here is a chance for a very unfruitful argument which can lead nowhere, and which may only cause the prospect to feel injured because his word is doubted. A better way than to argue is to invite the prospect to try out the machine on any hill he pleases.

Where Advertising Differs. The writer of advertisements must keep all these matters in mind, but his is again a more difficult task, far more even than the salesman, he must anticipate objections. Now it is a fact that very few people will read a lengthy argument about anything. The advertising writer is, therefore, forced to be brief. In his case the best

result will usually be obtained by picking out some one feature which characterizes his product and differentiates his from all others. Or he may select a number of such features. But in such a case it is better to bring out but one of them in any one advertisement.

He may advertise his as the *comfort car*, the *sensible car*, the *car of economy*, or the *car of no regrets*, and then in his advertisement explain why this machine possesses those qualities to an exceptional degree.

One advertiser may in this fashion call attention to the fact that his razor blades need no stropping or honing—a great saving in time; another may point out that his patented device allows the shaver to strop a blade easily, thereby lengthening the life of the blade and insuring superior service—a great saving in money and an increase in comfort.

It may be that each safety razor has other features which commend it. It may be that the compactness, the beauty of its lines, the superior finish, the exceptionally heavy silver or nickel plating, and a number of other good characteristics make one or the other of the razors a superior instrument. It would be poor psychology, however, to stress too many good points.

The main reason for this lies in the fact that the reader of the advertisement, unlike the customer at the store, or the person approached by the traveling

salesman, cannot act immediately upon his decision. It is, therefore, necessary to leave a clear-cut impression. This can only be achieved when the attention is concentrated upon one or a few striking characteristics.

Sometimes when advertising an article about which a prejudice is known to exist in the minds of the buyers, this prejudice itself may form a most effective point of attack. The safety razors mentioned are a case in point. No stropping, no honing have been advertised as special virtues of one make. This impression which has been created, that safety razor blades cannot be stropped is a splendid point of attack for a competing brand. All that is necessary is to point out that no one can expect to get a comfortable shave without stropping, and that this particular brand of safety razor makes stropping easy.

Another example is found in the methods followed to boost the sale of canned milk. This product is looked upon by many as an emergency product, only to be used in case no fresh milk is obtainable. The advertising campaign, therefore, lays emphasis upon the fact that it is cleaner, richer, more uniform, more convenient, than the fresh milk supply, and urges the readers to use it daily for drinking, for the making of ice cream, and in coffee, tea, and other drinks. Never in any of these advertisements is the suggestion allowed to creep in that it is not usually thought suited for

such purposes. All suggestions are positive, all pointing to a more liberal use of canned milk.

Advertisements, with the exception of a few containing coupons or inviting the reader to order by mail do not intend to carry the reader beyond the point where he desires the article. The advertisement must, therefore, leave a definite and clear-cut impression. Some easily remembered and agreeable thought must attach itself inseparably to the name of the article.

The task of carrying the prospect over the last lap of the route to a final decision and to definite action must usually be left to the salesman or clerk. It is clear that the salesman must start his selling talk where the advertising campaign leaves off. It is a "car of economy"—that can be taken for granted; this conviction brought the prospect to the agent. Besides this outstanding characteristic, it possesses many others equally favorable.

Action. In any selling situation the most critical point is that when the conventional "sign on the dotted line" point is approached. Most sales are lost by a clumsy handling of this last situation. The moment when action is suggested must be well chosen.

Some salesmen have a happy faculty of intuition which enables them to tell almost without fail when the sale is made. Others, however, anticipate this moment and lose a sale by arousing in

the prospect the feeling that someone is trying to sell him something he does not want, trying to "slip one over on him," as the slang expression goes. Others let the moment pass. They made a sale and never knew it. This mistake is quite as fatal as the other for the salesman will find himself at a loss what to say when the prospect retraces his steps and brings up some old objections which were apparently satisfactorily answered earlier in the interview.

The salesman must, therefore, be very careful to choose the right moment and to lead the customer to action without arousing his suspicions. A carefully worded question which implies that the customer has already decided to buy the article may carry him over the point of hesitation. It takes a strong decision on his part to say, bluntly, "I don't want the thing at all". A question of this type made at the right time is likely to result in the desired action.

Selling is, therefore, not as simple a matter as some are inclined to believe. Neither is selling a natural gift. To be sure, some persons possessed with a fortunate presence, a fine sense of tact, an intuitive sense of fitness, make better salesmen than others, but even they must provide themselves with knowledge, if they wish to secure maximum results.

Knowledge of the Goods. The first requirement for a successful salesman is a knowledge of the goods. Nothing destroys so quickly the confidence of the prospect in the goods, the salesman, and the firm, as

when he discovers that the salesman does not know the article he is selling.

A knowledge of the goods will allow the salesman to point out quickly those qualities which will appeal especially to the particular customer, and to answer convincingly any possible questions. This seems almost too evident to need any further explanation, and yet many salesmen venture out without even a rudimentary knowledge of the article they are trying to sell.

As a rule, the traveling salesman is better equipped in this respect than the retail store salesman. Manufacturers nowadays are training their salesmen before sending them out. Many of them maintain schools in which the salesmen are trained, first of all, to know their goods. The history of the company, the process of manufacture, the successive improvements brought in the product as a result of experience, the reasons for certain features of the article, the uses that may be made of it are all studied in detail, and trips are made through the plant, so that the salesman may learn by observation the problems of its manufacture. Finally, a course in selling, *i. e.*, in the making of a convincing sales talk is given, and the salesmen are now ready to go *on the road*.

Once out in the field, they are not left to themselves. Usually a prize is offered to him whose sales reach the highest total during a given period, or—and this is fairer to all concerned—to him who reaches or

excels the quota for his territory. In order to aid the salesmen in this contest and to encourage them in their work, many large concerns provide them with a sales manual, and keep in constant touch with them by means of printed or mimeographed talks, letters, or a weekly organ which, besides the records of the various men, gives items of interest about the factory, and about national and international events affecting the production or sale of the article.

The National Cash Register Company's Sales Manual consists of four chapters: (1) Salesmanship; (2) Approach; (3) Demonstration; (4) Closing Arguments. Much space is devoted to arguments which salesmen frequently face, and answers to them suggested by successful men in the field. This Manual is revised from time to time, and the experience of the salesmen is incorporated in the text.

A retail salesman should, first of all, endeavor to know his stock. A clerk who does not know his stock works under a decided disadvantage. He cannot answer questions of customers, he must spend a long time in trying to find goods, often searching in vain for what is not carried, and he cannot readily suggest substitutes when the article asked for is not in stock.

Next in importance to a knowledge of stock is a knowledge of the merchandise itself. A clerk who can talk about his goods with the conviction of an

expert will at once secure the confidence of his customer. Knowledge always produces confidence.

The educational departments of many of the larger stores give courses in textiles, leather, rubber, and other products, thereby enabling the clerks to acquire the specialized knowledge which they need in their profession.

One important point must be brought out in this connection. All selling, if it is to build good will, must be based upon truth. A knowledge of the goods will enable the salesmen to tell the truth about the goods they sell. Some stores make the policy of the store to sell without misrepresentation, an advertising point. It is, indeed, a strong advertising point, well calculated to build lasting good will. One large eastern store has a permanent reward offered to anyone who discovers an untruthful statement in the advertising matter of the store.

Knowledge of the Buyer. A knowledge of the goods must go hand in hand with a knowledge of the customer. More and more the "natural born" ability to sell is discredited, and selling is regarded as a science. The psychologists have recently interested themselves in a study of selling and advertising, and have pointed out how a knowledge of the processes of the human mind will aid one in leading others to reach desired conclusions. A study of the way in which the average person reaches his conclusions will enable the writer of advertisements to avoid many of the

pitfalls of this difficult art, and will make it possible for the salesman to make a more effective approach.

Many stores have organized classes where the sales people are given courses in the psychology of selling, and are trained to watch the mental processes of others. Through demonstration sales these lessons are brought home to them, and they are taught to analyze their own selling method, thereby tracing the probable cause for their failures. Once this critical attitude of mind has been created, half the game is won. Without it a salesman will never learn from past experience.

It must not be thought, therefore, that it is possible to give a person a selling talk or a set of rules that will fit all occasions. Every sale is a new problem. But it is possible to create in the salespeople a realization of what is and what is not a good selling method, and to arouse in them that critical attitude of mind which will lead them to approach each customer as a problem to be solved, and to adapt their method to the circumstances.

The Advertiser Faces Peculiar Problems. The writing of advertisements, though governed by the same fundamental principles as all other methods of selling, has problems of its own. The appeal of the advertisement is solely through the eye. Where the salesman should be trained to use his voice correctly, to eliminate any unpleasantness of speech, the writer of advertising copy, on the other hand, should learn

the correct use of type, the effect of different colors, and the proper layout of an advertisement. In other words, he should not only be a salesman who knows his goods and his customers, and who understands the psychology of selling; he must also be an artist and a printer. An advertisement may contain a splendid selling point, may be worded to perfection, but if the type is poorly selected, or the arrangement of the space is defective, the advertisement will still be a failure.

Another problem is faced by the advertiser, which does not exist for the salesman. He faces the selection of a medium. A number of possibilities suggest themselves. Magazines, newspapers, billboards, street car cards, handbills, circular letters, and booklets are but a few of the many ways advertising matter may be placed before the public.

It is in this selection of the medium that a knowledge of the product and of the possible buyer are important elements. These will enable the advertising manager to form a clear picture of the audience he wishes to reach, and of the most effective method.

Equally important is a knowledge of the medium itself. It is not enough that a medium reaches a large number of people. The persons reached must be possible buyers. A careful study of mediums will quickly lead to the elimination of a large number of them. Take, as an example, a make of talking

machines. Surely, no one would select handbills as a method of advertising such an article. The possibility that a bill would reach a likely buyer is very small, and even if a certain number of bills found their way into the hands of possible customers, it is very doubtful that the bill would be read by them.

In order to bring out the desirability of owning a talking machine, and a certain make in preference to all others, we must find our possible buyer in a reading mood. He must, if possible, be comfortably seated so that he may easily imagine, as he reads our message, how delightful it would be to listen to some beautiful melody. In other words, we must find the customer at home. A street car card or a billboard are eliminated. The newspaper, read quickly and then laid aside, is not the ideal medium. The magazine read in moments of leisure is the ideal. It is by far the most likely to be read in home surroundings, when a comparatively long period of leisure is set aside for entertainment. The right type of magazine reaches, moreover, a definite, selected audience, with a certain standard of taste and purchasing power. This is the ideal situation. Now picture how, without leaving the comfortable chair, one may listen to all the great artists of the world; how, by a simple change of record, one may listen to the songs of childhood, and you have all the elements of a successful setting for a fruitful advertising talk.

The selection of the magazine should be done with care. It should be a magazine read by people who buy talking machines of the type we have to sell. The *Saturday Evening Post*, the *Ladies Home Journal*, and many others like them at once suggest themselves, while the *Red Book*, *Spicy Stories*, and *The American Boy*, for obvious reasons, fall outside the range of possibilities.

Local Advertising. The local retail store faces a different advertising problem from that of the manufacturer. In this case, the object of the advertisement is frequently not so much to create a desire for an article as to call attention to the fact that a certain store carries in stock a well-known article which may have been nationally advertised.

The limited extent of the selling territory also influences the selection of the medium and the method of approach. The use of newspapers and of street-car cards is, therefore, quite logical and effective. But in the selection of the newspapers, care should again be exercised to select only those which are read largely by the class of people who frequent the store.

In local advertising it is sometimes possible, and in such cases frequently advisable, to keep a careful record of the effect of the advertisements on sales, so that it may be known which medium brings the best results.

This is very difficult in national advertising. In national campaigns, which make use of the order

coupon, or which invite the reader to write for a catalogue or sample, it is usual to give as the address not only the business address of the firm, but also that of a department, designated by a letter which differs for the various magazines in which the advertisement appears. In this way it is possible to determine the effectiveness of advertisements in different magazines.

The retail store is best able to test the value of a medium when advertising a special sale. This method is not infallible, since many outside circumstances enter in and make it difficult to arrive at conclusions. It may be that the morning hours are the best shopping hours for that line of goods, and that a violent rainstorm keeps the customers at home. Or it may be that some public event has diverted the attention of the trade.

In order to obtain the greatest efficiency, the salespeople of the store should be encouraged to keep informed of the goods that are being advertised and of the special selling points that are being featured. Much of the force of otherwise effective advertising is lost when the sales force is ignorant of the reason why customers come to the store. The sales people should be prepared to build their selling upon the advertisement, and to show the customers exactly what they ask for. Where such co-operation between sales force and advertising policy does not exist, the impression is often created that the advertisement

was dishonest, and merely a scheme to induce people to enter the store in order that other goods might be sold to them.

The window and counter displays should also bear a direct relation to the advertisements. If silks have been advertised, silks should be displayed. The whole store should be, so to say, on tiptoe to sell silks. The strong suggestion which is thus created in the mind of the customer in favor of silks is a powerful aid in selling.

It must not be forgotten that in the case of retail selling, failure with a special sale may have bad financial results. If the goods are marked down and a special advertising campaign has been carried on to sell them, and they are not sold during the intensive sales period, their future sales value is much diminished. Customers remember the past special sales and do not favor left overs from the sale.

Price Maintenance. A rush on account of a special sale may always be utilized to push the sale of other articles. Special sales are, therefore, used to a large extent in many different retail lines. Grocery stores use *leads*. This is a term used to indicate an article placed on sale at a low figure, sometimes even at a loss, in order to attract customers in the hope that they will buy other goods upon which a profit is made.

The manufacturer of the article which is sold at a reduction does not look upon this with favor. A re-

duced sale may have a bad effect on the local market. It may mean, if such sales occur frequently, that it will become impossible to sell the goods at the normal retail price, and that other retailers will begin to refuse to handle them.

This introduces the problem of price maintenance of nationally advertised articles. This question has been much discussed and is a vital issue between retailers and manufacturers. Many retailers are in favor of fixed prices for such articles, seeing in them a protection against price cutting. Other retailers, on the other hand, oppose any price restriction.

The difficulty of avoiding legal entanglements when making price agreements with retailers has led manufacturers to follow a safer course, and to appeal to the sense of fairness and to the self-interest on the part of the dealers to gain support for their price maintenance policy. This method is proving more and more effective.

The Sales Organization. In the larger manufacturing concerns which maintain their own sales organization, selling and advertising are usually grouped in one department. This is usually called the sales department, and consists of two subdepartments, each in charge of a manager; the sales department proper and the publicity department which looks after all advertising matters. Where the factory is not large enough to maintain its own advertising department it may employ an advertising agency.

In fact, many large concerns when planning an unusual or extended advertising campaign call in the advice and assistance of such agencies.

In the retail store the management of the sales force is frequently in the hands of the store manager. The floor walker, or floor manager, occupies a position similar to that of the foreman in the factory. He should assist the sales people in making sales, and should, therefore, be selected on the basis of his greater knowledge of merchandise and his superior sales ability. He should have the confidence of the salespeople, and be looked upon by them not as a driver or policeman, but as an instructor.

The Buyer. The buyer, discussed in the chapter on purchasing, is held responsible for the sale of the goods which he buys for his department. The sales force, their efficiency and control are, therefore, of vital concern to him, and he is usually given considerable power over them.

The buyer decides which goods shall be advertised, he gives the necessary information to the advertising department, he arranges for window displays with the window display department, he has his goods displayed in the various show cases, and he instructs the sales people in regard to the selling points of the goods and the advertising campaign. He makes recommendations for "mark downs," special sales, and other matters of store policy to the merchandise manager to whom he is directly responsible.

Summary. Advertising and selling are fundamentally subject to the same laws. Their differences arise from the fact that advertising has a more general bearing, and is confined to the written word, while salesmanship deals with the individual and the spoken word. In making a sale the following stages must be passed: attention, interest, action. Advertising and salesmanship complement each other. The advertisement arouses the interest, but the salesman must make the actual sale. A good salesman must know his goods, his customers, and must study the psychology of selling. The advertiser, moreover, must understand the art of printing and must know how to select the right medium.

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QUESTIONS FOR FURTHER STUDY

1. How is the selling field analyzed?

Reference: Fisk. Chapter I.

2. How may a salesman train himself for greater efficiency?

Reference: Fisk. Chapters VI, XI, XII, XIII.

3. Give ten reasons why a salesman should know his merchandise.

References: Fisk. Chapter VIII.

Field. Chapter XIII.

4. Go to some retail store in your town and watch a clerk sell. Describe three different sales, and point out where the clerk succeeded and where his method was weak.

Reference: Fisk. Chapter IX.

5. Describe an advertising campaign of some local store, and point out whether there was efficient co-operation between advertising, displays, and selling.

Reference: Field. Chapter XIV.

TEST QUESTIONS

1. What are the three stages in a successful sale?
2. What knowledge should one possess in order to become a successful salesman?
3. What additional knowledge is necessary in order to become a successful writer of advertisements?
4. On what basis should the advertising medium be selected?

CHAPTER XV

FOREIGN TRADE

Foreign Trade Necessary. Many articles used in our everyday life are the products of foreign lands. Coffee, tea, coco, tobacco, bananas, and spices; a list too long to enumerate shows our dependence upon the productivity of far distant lands. And not only products of the farm or mine, but manufactured products are imported to satisfy the needs of the American market. Matches from Japan, laces from France, pottery from Scandinavia, and cutlery and china from England represent but a few of a large number of manufactured products.

On the other hand, America's goods are finding their way into the markets abroad. In the early decades of America's history these goods were principally products of the mines and farms, but recently the exports have begun to consist largely of manufactured goods, shoes, automobiles, typewriters, sewing machines, and other products of our factories.

Foreign trade, therefore, means both importing and exporting. In fact, as every elementary text on economics undertakes to explain, exports and imports cannot exist independently of each other. The inflow of gold, which causes prices to rise in countries

with large exports and small imports, makes exports more and more difficult, and places a greater and greater premium on imports. Exports and imports, therefore, will tend to become equal. Where a country has invested large sums abroad upon which interest is due, imports may continue to exceed exports by that amount. If, on the other hand, a country owes money abroad, either in the form of interest upon investments made by foreign financiers, or on account of freights or insurance premiums due foreign companies, the exports may steadily exceed imports. Foreign trade, therefore, is influenced greatly by the financial relations between nations.

The Foreign Traders. Selling Direct. Manufacturers who desire to sell in foreign markets may do so directly or indirectly. If they decide to follow the direct method they may send their own representatives abroad, build their own foreign selling organizations, establish branch houses, or even factories abroad; in short, they may follow the methods they follow in the domestic market when developing trade intensively. Some manufacturers find that only by handling sales and sales promotion themselves can they expect to build up an active demand for their goods. It may also be that their goods are so highly specialized that it takes experts to sell them, to explain their use to the buyers, and to make adjustments and repairs. Such goods are usually best

handled direct. In no other way can a manufacturer be sure that his customers get the proper service.

Before undertaking these direct relations a manufacturer must count the cost. It requires a large capital investment and a large working fund to develop foreign markets. Not that it requires necessarily more than it would take to develop a domestic market, but returns are likely to come more slowly at first. The salesman and other employees usually must be better paid than those who handle domestic sales. Only large firms, therefore, with ample funds can afford to follow the direct method. The Singer Sewing Machine Company, the National Cash Register Company, the International Harvester Company, and many other large manufacturing concerns sell abroad largely by that method. But even they find it occasionally necessary to depend upon middlemen. In order to cover a territory completely, they often find it necessary to deal through firms which handle a large variety of products. It will not pay the Singer Sewing Machine Company to establish a retail store to sell direct to consumers in a place where only one or two machines are sold each year. A certain minimum of sales must be assured to justify the expenditures resulting from branch houses.

Selling through Middlemen. The smaller manufacturer cannot very well undertake to develop his foreign market. He does not, as a rule, possess the necessary surplus funds to invest in an extended

foreign campaign. It may be that he has enough capital available to develop the market in one section, but he lacks the means of entering equally profitable fields elsewhere. In such cases, the services of three classes of middlemen are available to him. He may deal through an export merchant or through an export commission man, who maintains offices in this country, or he may select some reliable representative among the many local firms in the foreign market.

An export merchant buys and sells goods on his own account. He buys, say, from an American firm and sells as best he can to foreign firms. The export commission house does business on a different basis. It buys goods from manufacturers only after it has received an order from a foreign buyer. In placing the order, the commission house legally acts as *agent* for the foreign house and not on its own account. This is quite an important distinction. A manufacturer may approach an export merchant, by sending a salesman to interview him, and persuade him to buy his goods. The merchant will then have to exert himself to sell them abroad.

The export commission house, however, does not buy in that way. If approached, the export commission man might answer: "All right, get my foreign customers to order the goods, then I shall place the order with you." In many cases, the foreign customer indicates the manufacturer from whom the goods must be purchased. In such cases the commission

house must follow instructions. When the foreign buyer orders articles without indicating the place where they should be bought, the commission house may place the order anywhere, always provided that the interests of its *principal* are properly served. In such cases, the manufacturer may successfully solicit an order.

The only way a manufacturer can, therefore, push sales through export commission houses is, as a rule, by advertising in the foreign market himself, and by filling the orders that are placed through commission houses. This is not satisfactory. There is always a great temptation on the part of the middlemen to substitute *just-as-good articles*, the manufacturers of which have shown them favors in the past.

Many commission houses are beginning to make agreements with manufacturers to push their goods actively in certain markets. This aid is not given free of charge. A commission is charged to the manufacturer on all sales and the manufacturer is expected to share to some extent the expenses of market development. In such a case, the commission house becomes the agent of the seller and should not charge commission to the buyer also.

The method of selling through local agents in foreign markets has many advantages and also many dangers. The advantages are chiefly that the local representative can give information about conditions and can follow up customers and prospects, and that

the manufacturer can leave the developing of the market largely to the representative, who will also attend to collection and assure the buyers the necessary service.

It is Necessary to Study the Market. The American business man has not devoted much attention to a study of foreign markets. He has been too busy studying the local market. Foreign countries may have interested him as a place to spend his vacation, but as a selling field they did not, until recently, attract his attention. The fact that most of our exports were for a long time agricultural products has been in part responsible for the lack of attention that has been paid to foreign markets. Agricultural products sell themselves. Their price is usually a world price and their quality is fairly well standardized. They move naturally wherever the need exists. They are dealt in on the exchanges and are sold by brokers or commission men, whose only sales organization is an office near the exchange.

Selling manufactured products is a different matter, here competition exerts itself in its most severe form. Price, quality, and service are all factors which influence the decision of the buyer. Frequently such products supply a need which must first be awakened, as in the case of most luxuries. To sell such goods demands a thorough knowledge of the market and a knowledge of the goods combined with selling ability.

Before venturing upon a foreign selling campaign the characteristics of the people and their habits and customs should be studied so that the appeal may be worded in terms which they will understand and like. The dignified and impersonal advertisements common abroad would be ineffective with American readers. Their appeal is not definite enough and they fail to arouse the active interest of the prospective buyer. On the other hand, the snappy advertisements with a note of command in them to "sign here and now" have an equally unpleasant effect upon foreign readers. They like to be asked to "please write for further information." They resent being ordered to do so.

These examples illustrate, of course, very elementary truths. They indicate, however, that a preliminary study is necessary and, above all, they indicate that it makes little difference what we think or believe to be the best thing, if we want to sell in foreign fields we must follow the same principle as in the domestic market—satisfy our customer by selling him what he wants in the way he wants it, and not by trying to sell him what we think he should want.

A careful study should be made of the purchasing power of the market. The density of population, the character of the cities, architecture of the houses, the condition of the roads, all these factors play an important part.

The Tariffs Must Be Studied. The customs tariff and the way in which it is administered must also be carefully studied, for this combined with the other charges, transportation, and insurance will determine what the cost to the consumer of the goods will be. It may not always prove a simple matter to get information about tariffs. In this, as in many other cases where information is desired, it is best to make use of the many public and private information services.

Private Sources of Information. Much valuable information in regard to tariffs and trade-mark laws in foreign countries and also in regard to the methods of packing and the making of shipments may be obtained through the foreign trade bureaus of the various chambers of commerce. Many of these chambers maintain libraries where the standard books on foreign trade subjects and the best export magazines may be found, and also maps, government bulletins, and directories of foreign cities. Some of these bureaus publish weekly or monthly foreign trade letters which give interesting and vital information about conditions and events in foreign markets.

Chambers of commerce are primarily designed to serve a city or a certain section of the country. There are a number of organizations which are wider in their scope and which serve the interests of all who care to become members or of manufacturers of

certain articles. Such organizations are, among others, the National Lumber Exporters Association and the New England Shoe and Leather Association. The most powerful national organizations are the American Manufacturers Export Association and the National Association of Manufacturers.

Much printed material is published by these organizations; one of the best known, *Export American Industry*, is published by the National Association of Manufacturers which also publishes *The American Trade Index*, which is a list of the members with their addresses and condensed information regarding their business.

Banks Promote Trade. Banks which are interested in financing foreign business, offer their clients much valuable aid in gaining a better knowledge of foreign markets. Many of them maintain a foreign trade department which answers questions relating to the export and import business and publishes daily or weekly bulletins giving information regarding commercial events abroad. The banks secure this information in part from their correspondents and branch establishments in foreign cities.

Commercial Museums. Another reliable source of information is found in the Philadelphia Commercial Museum. This is an institution supported by the City of Philadelphia and the State of Pennsylvania. It has wonderful exhibits of products from all parts of the world, showing the processes by which they

are produced and the use made of them. This same museum maintains an information bureau which is prepared to advise business men in regard to the many problems of foreign trade.

From these sources a business man can receive answers to his many questions, and advice in the solving of his problems. Many of these organizations are able to bring him in touch with firms abroad which handle his class of products, or which are interested in experimenting with them. They also offer the services of expert translators who will undertake for a moderate fee the translating of letters, catalogues, and advertising matter.

Government Sources of Information. More important even than these sources of information is the service which the United States Government places at the disposal of business interests.

Consuls in practically every important city of the world are in constant touch with the officials in Washington, and the reports which they send in, after being edited and condensed, appear in the *Commerce Reports* which are issued daily by the Bureau of Foreign and Domestic Commerce and may be received regularly by anyone who is willing to pay \$2.50 a year.

No business man interested in foreign trade can afford to ignore these reports. They contain the latest information regarding tariff regulations, steamship lines, banks, expositions, and many other sub-

jects of interest to the foreign trader. A list of Trade Opportunities appears on the last page of these reports. Special Consular Reports appear from time to time, giving information gathered upon some special topic. One such report, for instance, deals with public markets, another with port facilities. The *Special Agent Series* is another set of pamphlets issued by the Bureau. These are reports prepared by the special agents of the Bureau of Foreign and Domestic Commerce and deal with such topics as the hardware market in Australia or the shoe industry in Great Britain.

The Bureau maintains a number of branch offices in many of the larger cities of the United States, and in others it co-operates with local chambers of commerce by supplying regularly all publications of the Bureau, and by placing at the disposal of the business men additional trade information held for distribution in Washington.

Miscellaneous Government Aid The government aids foreign trade in many other ways. Merchants who import goods subject to import duties may postpone payment of the duty and store the goods in *bonded warehouses*. In case the goods are exported, no duty is paid at all. If, however, the goods are finally allowed to enter the United States, duties will have to be paid. This means a great saving to the merchants, for in this way they are not compelled to tie up their funds in paying duties until the goods are

actually released for home consumption, and by that time they may have been sold to others.

The restrictions on the use of these warehouses limit their use to comparatively few cases. It is now proposed to establish free zones or free ports on both the Atlantic and Pacific coasts. Such free ports are an enlargement of the bonded warehouse. They are bonded areas in which manufacturing, repacking, and reshipment may take place. The goods re-exported never pay duty. Only goods which cross the line into the United States customs territory pay duty. Such zones have existed for years abroad and have proved to be a great aid in foreign trade.

The Federal Government has also taken an interest in education for foreign trade. The Federal Board for Vocational Education has issued a pamphlet called *Vocational Education for Foreign Trade and Shipping*, which gives outlines and references for courses in foreign trade for high schools and colleges, and which may also be used as guides for further study.

Combination for Export Trade. Since the development of some markets requires much capital and specialized knowledge, small firms find it almost impossible to engage actively in foreign trade. By combining their resources, many small concerns may be enabled to employ a few able men at high salaries who can build an active foreign demand. The expense of a good-sized selling organization, though

high, when distributed over a number of firms does not mean a heavy burden on any one of them. Such combinations are now permitted under the Webb-Pomerene Act, which became a law in 1918. Prior to this law all combinations among competing firms were illegal as a result of the provisions of the Sherman Anti-Trust Law of 1890, the Wilson Tariff Act of 1894, and the Clayton Anti-Trust Law of 1914.

In other countries, more especially in Germany, combinations were encouraged by the governments which were anxious to promote export trade. The American exporters were, therefore, somewhat at a disadvantage. The new law permits combinations for export, but has been much criticized for not permitting the same freedom of action in import trade. A number of other minor criticisms have been made of the Act and it may be expected that a revision will soon be made, and that the revised bill will include importing.

Protection of Trade-Marks. An important matter which American exporters often overlook is the registration of trade-marks. All civilized countries provide for their registration, and once the trade-mark has been duly registered, the law protects the rights of the one who has registered the mark.

The question, who has the right to register a mark, is not answered in the same way in all countries. Some countries consider *prior use* as the real mark of ownership; others consider the act of *prior regis-*

tration the final proof of ownership. The result is that in some countries men who have no intention of using certain well-known trade-marks register them in order to prevent the foreign manufacturers who originated them from using them in their markets. Usually such persons are willing to sell their rights acquired in this piratical way for a good sum to the real owners of the mark. In order to avoid such conditions, the American manufacturer should register his mark in foreign markets even if he has no immediate intention of entering them.

Advertising in Foreign Markets. Advertising has not been developed to the same degree abroad as it has in the United States. A lavish use of advertising space may create an unwished-for impression. The foreign consumer frequently feels that an article which can bear such enormous advertising expense is probably selling far above its normal price. It is, therefore, best to follow custom. Though American methods may undoubtedly be used abroad they should be used judiciously. A careful study should be made of the selection of papers and magazines, for these have a much more sharply defined class appeal than similar publications in this country.

Many manufacturers send their catalogues to American consuls abroad. This is a good thing but it would be unwarranted to expect big results. Consuls cannot carry on an active campaign for anyone, and can only answer queries that come to them.

The Sample Fair. Recently the old "fair" has been revived in Europe, and the American manufacturers will do well to acquaint themselves with its features. A *fair*, or *sample fair*, is a gathering of representatives of manufacturing concerns who bring samples for the inspection of visiting buyers. Such fairs bring together a large number of sellers and buyers and make it possible for exporters and importers to place their orders without traveling over long distances to visit each plant individually. Prior to the war, only two such fairs of international importance existed, the Leipzig Fair in Germany, and the Nizhni Novgorod Fair in Russia. Both of them originated several centuries ago when such periodic fairs were the only way in which international trade could effectively be carried on. At the time of such fairs the princes or lords agreed to allow traveling merchants free and safe passage to and from the market places. This was called "market peace," for war was in those days the normal condition of society. Those early merchants carried with them their entire stock of goods, but they would accept orders to be filled at the next market which usually took place every six months.

As the goods became more standardized so that buying by sample and description became possible, the fairs gradually disappeared and those that remained, with the exception of Leipzig and Nizhni Novgorod had only local significance. Russia, be-

cause of its poor roads and long distances, still has a large number of such local fairs.

Since the war began many fairs have been opened and they have all become permanent institutions. The goods sold there are all of a type which must be inspected closely before they are purchased, machinery, laces, pottery, and furs are all in this class. The most important modern fairs are those of Lyons, Bordeaux, Paris, London, Glasgow, Utrecht (Holland), and Göteborg (Sweden).

How Goods Are Quoted. When entering a foreign market the salesman and his principal should make a careful study of the customs of the market. No one who did not know the hardware trade in this country would expect to make many sales until he had first learned how dealers usually buy their goods, what terms they ask, and how payment is usually made. The same thing is true, of course, in a foreign market. Customs in markets differ greatly. Wheat in the United States is quoted and sold in cents per bushel, in France in centimes per kilo, in British India, however, the quotation indicates how many sers can be obtained for one rupee.

The first thing, therefore, is to learn the systems of weights and measures and the coinage systems used. The next step is to learn the methods of quoting. Various methods may be followed. Some goods are always sold *f. o. b. port of exportation*. This means that the goods are delivered free on board of the

vessel and that all further expenses, such as transportation and insurance must be paid by the buyer. It is more convenient for the buyer and, therefore, good business, to quote *c. i. f.* This means cost, insurance, and freight included. The buyer may then know what the goods will cost when they arrive at the port of importation. Sometimes, and this occurs frequently in Europe, quotations read *free godown* or *free warehouse*. This means that the price quoted includes all expenses, even the cartage to the warehouse of the buyer.

American firms sometimes do not recognize sufficiently the importance of making it easy for the buyer to figure what the goods will cost him, and are too much inclined to quote *f. o. b.* New York, leaving the buyer very much in doubt as to what additional expenses are likely to accumulate.

Methods of Payment. A not uncommon way of quoting is "cash New York." This means that the goods are not dispatched until the cash has been received. It takes little imagination to see the objections to this method of demanding payment. The buyer is expected to pay before he has been able to inspect the goods and long before he receives them. Such terms are considered insulting by well-established foreign firms.

Cash against documents (d/c) or *Documents against payment* (d/p) is another common quotation. This means that the documents are handed over by the

bank to the consignee only after he has paid a draft for the amount of the invoice. This amount the bank then transmits to the exporter or to the American bank which bought the draft from him. The documents referred to will be discussed more in detail in the following chapter. The most important document is the *bill of lading* (B / L), which is a receipt issued by the steamship company for the goods and which is the only document by means of which ownership of the goods can be transferred. Or it may be that the bank has been instructed to deliver the documents upon *acceptance of the draft* (d / a). In this case, the draft is usually a time draft, upon which payment is due in one, two, three, or even six months. The length of this *credit period* is determined according to the customs of the market and of the trade. Agricultural countries usually require long-time credit, while in highly industrialized countries like England, France, or Germany, good service and low prices are bigger selling points than long credit.

Summary. Foreign trade is necessary to a country and must consist of both imports and exports. Financial relations with other countries may cause either imports or exports to exceed for a long period. Foreign trade may be carried on direct or indirect. Indirect foreign trade takes place through export merchants and export commission houses. It is necessary to study the market carefully so that the purchasing power of the market and the character

of the goods demanded may be known. Many sources of information are available, private and public. Chambers of Commerce, banks, and museums supply information. The government reports, especially the Commerce Reports, are valuable. The Government also aids by supplying bonded warehouses, by allowing combinations for export trade, and by protecting trade-marks. It is necessary to study carefully the various methods of quoting the prices and quantities of goods, and the methods of payment.

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- J. R. Smith. *Industrial and Commercial Geography*. Henry Holt and Company.

QUESTIONS FOR FURTHER STUDY

1. What is meant by a favorable balance?
Reference: Smith. Part II, Chapters I, XV.
2. In which cases is selling "direct" advisable?
Reference: de Haas. Part I, Chapter VII.
3. Are all Chambers of Commerce like the American?
Reference: de Haas. Part I, Chapter V.
4. What is the Government doing to help the development of foreign trade?
Reference: de Haas. Part I, Chapter IV.

5. What conditions led to the passage of the Webb-Pomerene Law?

Reference: de Haas. Part I, Chapter X.

6. How may prices be quoted in foreign trade?

Reference: de Haas. Part I, Chapter VIII.

TEST QUESTIONS

1. Explain why foreign trade means both importing and exporting.

2. What is the difference between an export merchant and an export commission house?

3. What must one know about the foreign market before he can safely undertake to do business there?

4. What private sources of trade information are open to the foreign trader?

5. Why was the Webb-Pomerene Law necessary?

6. What is a *sample fair*?

7. What is the meaning of the following abbreviations: *f.o.b.*; *c.i.f.*; *d/p*; *d/a*; *B/L*?

CHAPTER XVI

THE TECHNIC OF FOREIGN TRADE

Checking the Order. We shall first describe, step by step, how an order is filled, and how it reaches the foreign consumer. This description of making an export shipment will be followed by a description of the process of importing. When a foreign order reaches a manufacturer, it is referred to the foreign department or export department. In this department it will, in most cases, be recorded according to the following method.

The mail clerk opens the letter and removes the contents from the envelope. Upon discovering that it is an order, he will send it to the desk of the credit man. This official will have on file the necessary information from which he can tell whether the firm sending in the order is reliable, and, if so, what terms have in the past been quoted in the territory from which the order comes, and to this firm in particular. He will make a note of his findings and attach it to the order which is now passed on to the manager of that foreign territory.

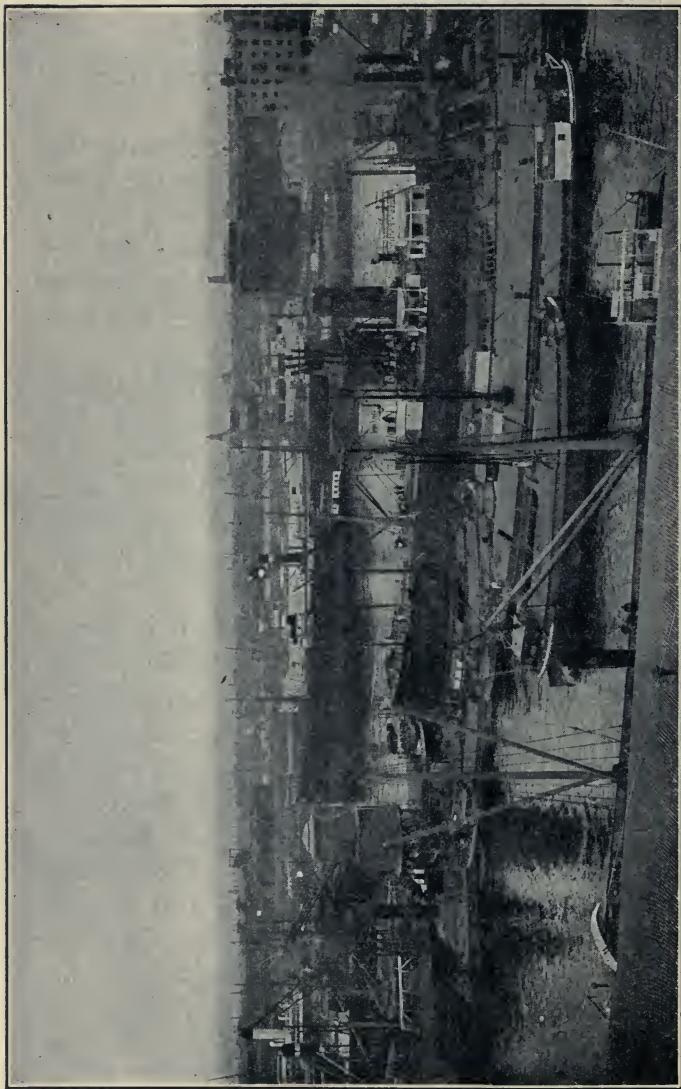
The manager approves of the order and instructs his stenographer to write a note acknowledging the order with some expression of appreciation, and

whenever possible, he indicates the probable time of dispatch of the order.

Preparing the Order. Now the order goes to the order clerk. It is his duty to see to it that the order is properly filled. If the goods are to be bought outside he, or a purchasing agent, must send out requests for quotations and place the order at the best price. If the goods are to be manufactured the production department must be notified.

The goods when received from the outside source are inspected by the domestic shipping clerk and passed on to the foreign shipping clerk, who knows how goods for foreign customers should be packed. In case the goods were in stock, the stock room or the production department delivers them to the foreign shipping clerk.

Procuring Freight Space. Meanwhile it is necessary to procure freight space. Staples shipped in large quantities, such as ore, wheat, cotton, and lumber, are usually handled in full cargo lots. That is to say, they require an entire vessel. In such cases it will be cheaper to *charter*, *i. e.*, hire a *tramp*. A tramp is a ship not doing regular "line service," which picks up freight where it may be found and carries it to any place desired. The rate that is charged for such services will, of course, be influenced by the distance, the time required for the trip, the size of the ship, the degree of competition between carriers, and also by the likelihood that an



American ships unloading grain for transshipment at the Port of Rotterdam. Floating grain elevators are transferring the grain from the ship's hold to the large barges which will carry it further inland. In the distance are the bonded warehouses of the "Veems," or warehouse companies.

outward cargo will be secured at the port of destination. The contract between the shipowner and the shipper is called a *charter party*. A shipper need not attend to all details himself. He may, and usually does, secure a vessel through a *ship broker* who, through his correspondents in many ports is informed of the whereabouts of ships and of freight waiting to be moved.

Manufactured products, however, do not usually move in such large quantities. Moreover, because of their great value, and because almost always a definite date of delivery has been set they cannot move on slow and irregular steamers, but must make use of fast reliable line service. The rates may be higher, but the better service offsets this disadvantage.

In asking for freight space, sufficiently detailed information must be furnished so that the steamship company may know the weight and volume of the shipment. The steamship officials need this information so that they may proportion the cargo offered to the various ships.

The steamship company now makes a freight offer which must be accepted without delay. Once accepted the freight space is reserved whether used or not. When the offer is accepted, the steamship company sends a *shipping permit*. This is an order to the ship's clerk on the dock to receive the goods when delivered.

Marine Insurance. This shipment must now be insured against the dangers of the voyage. This may be done by taking out a separate policy for the shipment, or it may be done under *open policy*. The open policy is a contract between shipper and insurance company which insures all goods to be shipped during a certain period. All that is necessary under such a policy is to notify the insurance company that a certain shipment has left by a designated vessel, whereupon the insurance company forwards a policy covering the shipment. The marine insurance policy is frequently made to cover an amount in excess of the cost of the goods. This is necessary to cover all incidentals, such as freight, brokerage, and consular fees and interest on the investment.

Invoicing the Shipment. The preparation of the invoice is a difficult piece of work. The document must contain a careful description of the goods, the unit price, the total price for each group of articles, and finally the grand total. From this must be deducted the discounts agreed upon. If extras, such as packing, consular fees, freight, and insurance are to be charged to the buyer, these items may be added to the bottom of the invoice, or they may be brought together on a separate sheet called a "statement of charges." Foreign invoices must always be signed by the export manager or some other official of the concern. The laws of most foreign countries require this.

The boxes containing the goods should be marked, not only with a distinguishing mark, such as a triangle or a square, which should be the same for all cases of the shipment, but should be also numbered consecutively. Upon the invoice, each box should appear separately with its proper number. Many countries require this, but it is recommended even when not required. The numbering makes it a simple matter to trace each box and to discover shortage. In order to facilitate the sending of cablegrams relating to the shipment, each invoice should bear its own cable code word, and at the top of the sheet should be indicated the cable codes in use at the office.

The invoice clerk after carefully making out the invoice should now have it checked with the boxes, which may then be closed and made ready for the steamer.

The Boxes. The boxes should be new and strong though not excessively so, and the boards should be fastened with screws rather than with nails, which pull out easily. It is always best to strap boxes carefully; this strengthens the boxes and also prevents pilfering. Many countries require that they be marked with a stencil which shall indicate the weight in kilos and pounds, and in some cases the name or initials of the consignee.

The Dock Receipt. The boxes are now ready to be sent to the dock. The shipping clerk instructs the

truck driver where to take them and gives him the *shipping permit*. He will also hand him another blank filled out and only in need of a signature. This is the *dock receipt*. The driver takes the boxes to the wharf and hands the clerk at the dock both the permit and the receipt. The permit instructs the clerk to receive the goods. He inspects them in order to make sure that the shipment is complete and corresponds with the statement in the dock receipt, after which he signs the dock receipt. The driver returns the receipt to the shipping clerk who must now procure the final documents.

The Bill of Lading (B/L). The dock receipt must be exchanged for an *ocean bill of lading*, which is not only a receipt but also a contract to carry goods to their port of destination. The bill of lading contains a large amount of reading matter, all of which is intended to allow the company to disclaim liability in all cases except negligence on its part. A number of copies of such bills of lading are issued. Some of them, usually two, are signed; the others, sometimes four or five, are unsigned. The signed bills of lading are called *negotiable* bills of lading, for by means of them the ownership of the goods may be passed from person to person. All that is necessary is to indorse the document as if it were a check, or any other negotiable instrument.

The unsigned copies, or *non-negotiable* bills of lading, are used for purposes of record. One may be

sent to the consignee to show him that the shipment has actually taken place. One copy, which is left with the captain, who uses it to make out his list of shipments, *the manifest*, is called the *captain's copy*. Another copy may be kept in the files of the shipper and still another in the files of the steamship company.

The Export Declaration. The Government requires that whenever a shipment is made, whether by ship or by train, to some foreign country, the shipper shall make out an "export declaration." This declaration gives the name and address of the shipper, the name of the carrier, the name and address of the consignee, and a detailed description of the articles, with values and country of origin. This information is used by the customs officials to prepare the statistics of exports. Before the customs officials will grant *clearance* to the vessel, the captain must produce the ship's manifest and also export declarations for each separate shipment. Steamship companies, therefore, frequently refuse to issue bills of lading unless such export declarations are produced.

Other Documents Required. Many other documents may be required before the shipment is ready to leave the United States. In the case of process butter and meat or meat products, a certificate of government inspection is required. Where the goods exported contain materials previously imported and upon which duties have been paid, the government

will allow a refund, or *drawback*, of 99 per cent of the amount paid. A "notice of intent" must, in such cases, be made out and filed with the collector of customs. The claim is then investigated by the treasury department.

During the war an "export license" was required for every shipment. The license was issued by the War Trade Board. The main object was to save tonnage by eliminating unnecessary imports and exports, and to prevent goods from reaching the enemy. Such restrictions are not found in peace times.

Requirements of the Customs Authorities. In order to satisfy the foreign customs service, a number of documents must be secured. Frequently one or more bills of lading must be viséd by the consul of the country of destination. The same official attaches his *visé* to the *consular invoices* and to the *certificates of origin*. The consular invoices contain substantially the same information found in the commercial *invoice*. Frequently as many as six copies must be made and certified. The consul charges a fee for this certification which varies according to the countries. French consuls charge \$2.50 for consular invoices and \$2.20 for the certificate of origin.

Disposition Made of These Documents. These documents are now collected, clipped together, and sent to the foreign consignee, for without them he cannot receive the goods from the transportation company, nor satisfy the customs requirements. If the agree-

ment was that he would pay or accept a draft upon the receipt of these documents, the exporter will obtain the services of a bank to make the collection.

The draft may be discounted, or the bank may lend a certain amount of money on it. In order to make the collection certain, the documents are then not sent to the consignee, but are handed to the bank. The bank will see to it that these valuable documents do not pass into the hands of the consignee until he has lived up to his obligations. Such a draft is a *documentary draft*. The bank will make certain that these documents constitute a *full set*, for if any one of the negotiable bills of lading were missing, the value of the remaining ones would be doubtful.

Notifying the Consignee. All that remains now is to notify the consignee by means of a letter; this is called a "shipping advice." In this letter the manner of shipment, the manner of collecting the draft, and the company with which the insurance has been placed are indicated along with such other details as will give the foreign buyer all necessary information about his goods.

Such letters, in fact, all communications sent to foreign countries, should be followed by a carbon copy dispatched by a later mail. Care should be exercised that the carbon copy actually goes by a later boat. The purpose is to make sure that the letter will reach its destination even if one boat

should meet with an accident. For the same reason, foreign drafts are frequently made out in duplicate; in some cases as many as three or four copies are made out. These are called according to the number, the first, the second, the third, etc. In the body of the drafts the number of copies which have been prepared is then noted.

The Functional Middleman. It is plain that making an export shipment is no simple matter. It requires knowledge of technical details and great accuracy. Exporters who do not possess the necessary information or do not want to give the time and attention which these shipping details demand, make use of freight forwarders. Manufacturers situated inland also make use of these middlemen because this is the simplest way in which they can obtain representation in the port.

The freight forwarder will attend to all shipping details, thereby relieving the shipper, but this is by no means the only function he performs. A large shipment usually receives better accommodations, both on land and water, and the rate for each unit of a large shipment is, therefore, lower than on a small shipment traveling independently. It costs as much to send one pound as to send a ton, for freights are usually expressed in tons and steamship companies have established the custom of requiring a "minimum" bill of lading, which means that five or

ten dollars, as the case may be, will be charged, no matter how small the shipments.

Consequently by combining many small shipments into one large shipment, the charge per individual shipment will be much less than when shipped separately. Freight forwarders share part of these advantages with their customers and are, therefore, able to quote favorable rates and to give good service.

In many cases the United States Government is willing to refund duties paid upon foreign articles when they are re-exported. This refund of duties is called a *drawback*. It is necessary to enter a claim for this refund at the time of re-exportation. Exporters intending to claim drawbacks find that *drawback brokers* who specialize in that line of work can attend to these matters more efficiently than they, while *customs brokers* offer their services to all those who import goods, and who need assistance in meeting the requirements of the U. S. Customs Service.

Importing. We hear much about exporting and how the future of the United States depends upon it. But importing is equally important. Without importing we would not only be forced to forego many necessities and many more luxuries, but our industries would not be able to produce many things which now are marketed at home and abroad.

Much of our importing is in the hands of foreign firms. Japanese goods are brought into this country

by natives of Japan, while Armenian and Turkish rugs are imported largely by natives of those countries. This is quite natural since such specialized articles require a thorough knowledge of the product and of the customs of the market. They are, to a large extent, the product of home industry and must be bought up by native buyers who travel from town to town and collect them, after which they offer the goods for sale to either native or foreign buyers. Many products find their way in this fashion into the channels of foreign trade. Chinese tea furnishes an example. It is bought from the small farmer, sorted, and graded by the collector, and branded with his *chop* or trade-mark. The fact that it is difficult to secure uniform and reliable quality in this way is responsible for the decline of the Chinese tea trade. The English tea, raised on large plantations under single ownership and cured according to standard methods, is uniform in quality.

Buying Methods. As in export trade, goods are imported direct or indirect. Many domestic importers supply their needs through commission houses who place their orders in foreign countries. Some of these commission houses are American, others are foreign houses. There are also numerous importers who import for their own account—they correspond to the export merchant in export trade—and who supply the domestic wholesale houses and retailers.

The United States Customs. When importing goods into the United States, the United States customs regulations must be fulfilled. Since changes in the tariff or changes in the interpretation of the regulations affect the amount of the import duty, goods are sometimes sold before importation *subject to changes in the tariff*. This protects the importer.

It is important to know what documents are required and how goods are *cleared* through the custom-house. Usually three consular invoices are required. They must contain a description of the goods, their value at the port of exit, expressed in the currency of the exporting country.

In the case of American goods re-imported, a special form of consular invoice is needed; a *re-importation certificate*. In addition to this, there are many special documents required in the case of articles like hides, food, and drug products.

A number of articles may be imported "in bond." This means that no duty need be paid as long as the goods remain in a specified place, usually a bonded warehouse. Should the owner desire to remove them from this warehouse, then he must first pay duty. All other goods are subject to a *cash entry*, *i. e.*, the owner declares that he is prepared to pay duty immediately. The first step is, therefore, to determine the amount of the duty. The duty is based upon the value and quantity of the goods. Information in regard to these facts is contained in the consular in-

voice. The *appraiser* at the port of entry, however, determines whether this declaration is in accordance with the facts and when he discovers that the *declared* valuation is less than the *appraised*, an additional duty of 1 per cent of the appraised value is levied for every 1 per cent by which the value was understated. An understatement of 75 per cent or more is considered a *fraudulent entry*, and is punishable by heavy fine, confiscation of goods, and imprisonment.

This appraisal takes time. In order to expedite the passing of the goods into the hands of the owner, the customs officials may retain a small portion of the goods, never less than 10 per cent, and allow the bulk to be taken away after a deposit has been made large enough to make certain that the duties will be paid. After the amount of the duties has been determined, a *delivery permit* is issued as a receipt for the payment of the duties and the goods are released.

How the Appraisals Are Standardized. Opinions of persons in regard to the "true market value" of an article differ, and such differences may lead to disputes in regard to the duties to be paid. For this reason an importer who disagrees with a judgment rendered by the appraiser may appeal to the United States Board of General Appraisers and to the United States Customs Court of Appeals. Many trades have prepared samples of the most common grades of their importations in order to facilitate the work

of the appraisers. The Comparative Value Report Bureau acts as a clearing house for this information and aids in securing more uniform methods of appraisal at the various ports of entry. Notwithstanding these safeguards, certain ports of entry are known to be more lenient and lax than others in their application of customs regulations, and importers through other ports are, therefore, somewhat under a disadvantage. It is impossible to bring absolute uniformity in the application of a system so involved and detailed as the United States Tariff.

Summary. When an order has been received it is passed, first of all, to the credit man, after which it reaches the order clerk, who proceeds to fill it. The shipping clerk secures freight space, and looks after the insurance. The invoice clerk makes out the invoice and checks it with the goods and with the order. The goods are taken to the wharf where the shipping permit is exchanged for the dock receipt which in turn is exchanged for the bill of lading.

The documents required are: the export declaration, the certificate of origin, and the consular invoice or invoices. The documents are pinned to the draft as it is taken to the bank to be discounted.

Importing is of equal importance. Much importing is in the hands of foreigners. Importing may take place direct and indirect. The United States Customs regulations require three consular invoices. Goods may be imported in *bond*. If goods are en-

tered for consumption a *cash entry* is made and duty is paid immediately. The goods are *appraised* by a government appraiser. It is difficult to secure uniformity in these appraisals.

REFERENCES

See references of preceding chapter.

QUESTIONS FOR FURTHER STUDY

1. What information should the salesman send in to the home office?

Reference: de Haas. *Foreign Trade and Shipping*.
Part I, Chapter IX.

2. What is the meaning of a *clean bill of lading*?

Reference: de Haas. Part II, Chapter II.

3. What different kinds of tons are used in describing cargo?

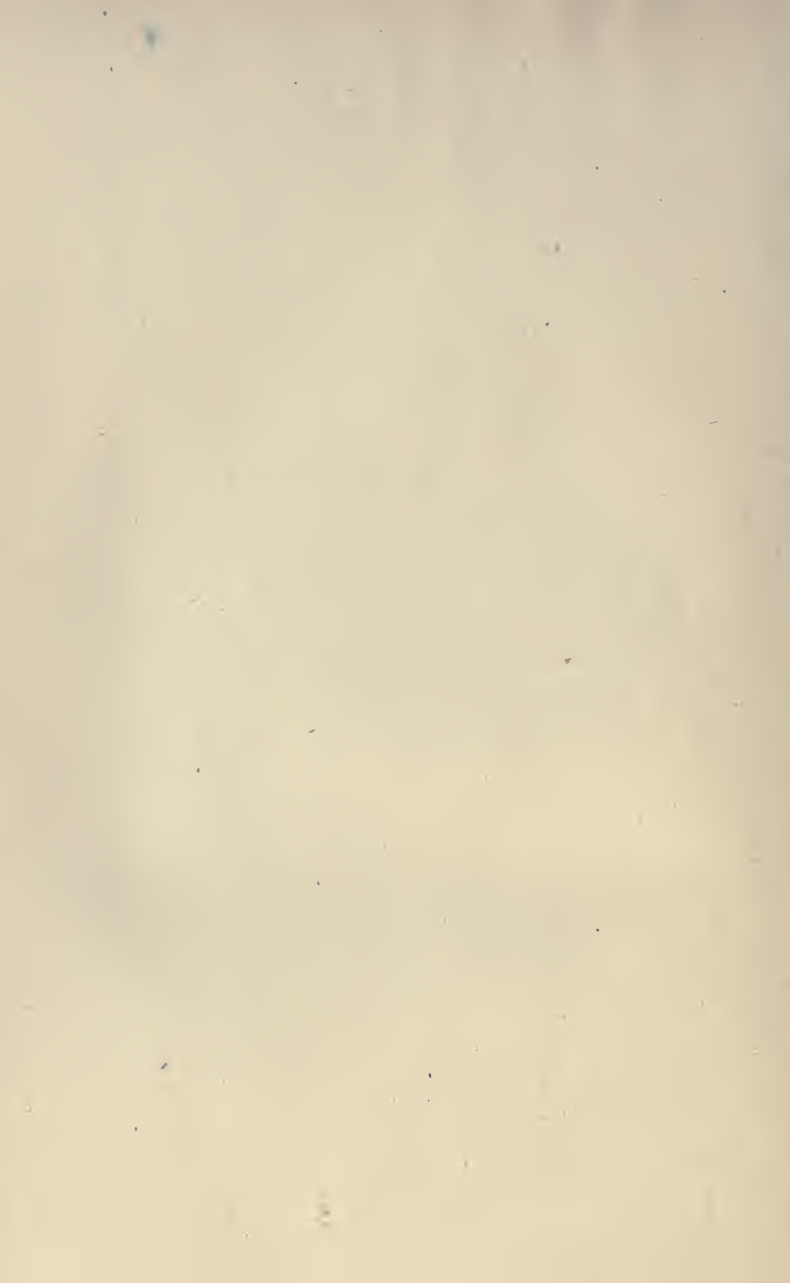
Reference: de Haas. Part II, Chapter I.

TEST QUESTIONS

1. Trace an order through the export department.
2. What is a *charter-party*?
3. What is an *open policy* of marine insurance?
4. What information should be contained in an invoice and how should it be checked?
5. Enumerate the documents that must be secured to make a shipment, beginning with the engaging of freight space until the goods are on their way to the foreign customer.

6. What different middlemen have been mentioned and of what does their work consist?

7. What is meant by a *re-importation certificate*, a *notice of intent*, a *cash entry*?



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